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Original Articles.

THREE CASES OF PUERPERAL INSANITY WITH REMARKS UPON THE HISTORY, CAUSES, PATHOLOGY AND TREATMENT OF THE DISEASE.

A Paper Read before the Cincinnati Obstetrical Society, February 21, 1884,
By Gustav Zinke, M.D., Cincinnati, O.

The following is simply a concise but complete report of three cases of puerperal insanity as they occurred in my practice recently, and to which I have appended a few remarks on the history, symptomatology, pathology and treatment.

Mrs. A., aged thirty-two, was attended by a midwife, and in her seventh confinement. All previous labors were easy and followed by good recoveries without any untoward symptoms, either during gestation, labor or period of nursing. All children living and healthy; no hereditary taint of any kind; herself a blonde, strong and robust; family relations pleasant; surroundings comfortable. Her confinement this time progressed slowly and with a great many severe but ineffectual pains. She had been in labor three days (as stated by the midwife), and on my arrival I found her in the second stage of labor, child living and in the first position; fetal heart beating very feebly; pains severe, but short in duration, and exerted no influence upon the child. The abdomen was extremely tender and tympanitic; the skin moist and cold; pulse quick and easily compressed; temperature 97° (sublingual). Her nourishment had been very scant since taking to bed, consisting mainly of some tea with milk and a little toast. She was the picture of exhaustion.

Forceps were at once resorted to. Putting the woman across the bed I had scarcely locked the instruments and begun to make gentle traction when a sudden change came over her: She relaxed, grew frightfully pale and with mouth and eyes wide open she looked wildly around with features of astonishment. Her husband and the midwife became very solicitous, and for a moment I hesitated what to do, for it was the first time I beheld such a sight. I requested them to hold her so as to accomplish delivery. The moment I again made traction she raised up, took hold firmly of my arms and covered the husband, nurse and myself with a torrent of the most violent abuse, such as I have never heard before.

She was frantic, and shrieked so fearfully that the rest of the women living in the house were present in less time than it takes to tell. She fought and struggled so that for a moment it seemed necessary to abandon my purpose. With the aid of the newcomers we succeeded in getting her on her back once more, and, under a continuous stream of foul language and blows and kicks, I delivered her of a living and healthy baby boy. No sooner was this accomplished than she fell back exhausted, closed her eyes and seemed to sleep. Her skin was now hot, her clothes wet with perspiration, pulse 140 and very feeble. Uterus contracted, and, with the finger in the vagina, I felt the placenta coming down slowly; making gentle traction upon the cord I succeeded in getting it away in a short time. Being cleaned, we lifted her in a better position in bed, when she awoke with the expression, "Papa, why don't you send for the doctor, I will die if this lasts much longer." Being informed that I was there and that all was over, she felt for her abdomen, asked for the baby and when it was handed to her she kissed it affectionately. She then partly remembered some of the bad things she had said and asked us all to forgive her, that she did not know how it happened, it all seemed like a dream. She made an excellent recovery. There was no return of the mania then nor since. Pelvis ample, child weighing nine and one-half pounds. Urine was not examined.

Mrs. H., aged thirty-three, had four children, one died of small-pox and another of tubercular meningitis. She was then and always has been a very healthy woman. Family history good. I was previously engaged to attend her in this confinement and delivered her once before with forceps. Her labors were all made difficult by malposition of the child (one being a breech, one a shoulder and the other two face presentations). Notwithstanding, her recoveries were good, but left her in one of them with a badly lacerated perineum, which, however, had so far not disturbed the position of the womb, nor given rise to any of the usual looked for consequences. At the time of her confinement I happened myself to be indisposed with an abscess in the throat (January 2d, 1884), and therefore requested my brother, Dr. Bruno Zinke, to take charge of the case. Labor was tedious and exhaustive and was finally terminated with the use of forceps, the child being in the second position. The sixth day after delivery she was noticed to be gloomy and despondent, yet cared for the infant with her customary zeal and love. On the seventh day she quarreled with her husband; told him that he was negligent in his duties and lacked affection for her. Later on she tore every picture from the wall, packed all movable articles in trunks and baskets ready to be moved, as she said, because the river was rising and the whole house would be inundated. There was no prospect for a flood then, and more than that, the house was entirely within safe distance if the river should rise to a hundred feet. I was consulted for the first time concerning her trouble

ten days after she had commenced to wander. She was kind towards me and answered every question intelligently, but complained of the ill-conduct of her husband, and of the constant danger her home was in from the flood. She wanted to die; said she was bewitched; that all her furniture was being destroyed, and no matter how nicely she kept her baby clothes and all other things, they were constantly disturbed by some one, whom, she could not tell. She also complained of sleeplessness, but had a good appetite; her bowels moved regularly and she seemed otherwise well and hearty. No albumen was found in the urine. I prescribed chloral hydrate, grs. x., and potass. brom., grs. xx., to be taken before bedtime, and to be repeated every hour until sleep supervened. She took three doses the first night; felt and behaved better the next day. The second night two doses were required, and the succeeding nights, for one week, only one dose was needed to cause sleep when the medicine was withdrawn. She grew better and more reasonable every day and is now restored to perfect sanity. Duration about four weeks.

Mrs. G., aged twenty-six, fifth confinement; two children died; one aged two weeks, cause of death unknown; the other died of tubercular meningitis during infancy. Was called December 6th, 1883, to her last confinement by the midwife in attendance. Patient, medium height, strong and well developed. Labor commenced twenty-four hours prior to my arrival. Though somewhat prostrated by the tedious labor and continuous and severe pains, she was by no means exhausted. Child was in first position, second stage of labor. Pains were still frequent, but very severe and short in duration. After remaining awhile, and seeing that no progress was made in the descent of the child, I concluded to apply the forceps to shorten the suffering of the woman and prevent the death of the child, which was imminent by the feeble action of the heart. Labor was quickly terminated and the placenta came away, without delay, spontaneously. Child, female, was very large and well-formed. The uterus having well contracted, and the patient being otherwise in good condition, I left after giving the proper instruction to the midwife and husband. About an hour after I was called upon by the husband, stating that his wife was "bleeding a great deal." I ordered fluid extract of ergot to be given every four hours in twenty-drop doses. She made a good recovery, and, on seeing her twice after her confinement to assure myself of the favorable progress of the case, I left her to the care of the attending midwife.

I heard nothing further of the case until I was called, January 16th, 1884, by her husband, who stated that his wife was out of the head. When I saw her, her appearance was that of a woman in perfect health. She nursed and cared for her baby like any sane mother, but complained of a constant headache and sleeplessness; that she could not get done with her work, that she wandered constantly and was afraid that

a great calamity would soon befall her and her family. Her appetite was tolerably good, bowels moved irregularly, no fever and no pain anywhere. Advising perfect rest and no visitors, and the employment of a servant to do the work, I prescribed chloral hydrate grs. x., potass. brom. grs. xx., tinct. hyoscyamin gtts. xv., to be taken every four hours. She improved slowly but gradually and a week's treatment found her to be nearly well. But, having obtained the following family history of puerperal insanity, I advised her husband to inform me at once of any tendency toward a recurrence of the trouble. Her mother had been subject to melancholia of a severe type after every confinement, just of how long a duration, her husband was unable to state. With the commencement of the menses the wife, too, became a victim of the same affection at every menstrual period and also after every subsequent confinement. The disease manifested itself formerly with more severity and was longer in duration than at this time. In none of these confinements did she nurse her child and her attending physicians attributed the cause of the disease to this fact, predicting that, should she ever be able to nurse her child, melancholia would be avoided. As we see, this has not proved true, though the attack was not so severe as any of the preceding, which commenced from two weeks to three months after delivery and lasted from three to six months.

At the time at which I attended her for her mental trouble I did not examine her urine, because melancholia had already existed for several weeks and, as far as I know, albumen was never found to exist in the urine after the disease has lasted so long. It may here be remarked, for the sake of accuracy, if for no other reason, that when I concluded to report these cases I sent for the husband to obtain a correct history of his wife's case. To my surprise, I was informed that his wife had another physician, who is still treating her at this writing. The cause of the change was that she did not continue to improve much after my last visit, and, besides, "a pain in the stomach" had added itself to the trouble already existing. The physician, a junior in practice, concluded that the difficulty was due to some trouble in or about the uterus, and found it necessary to scrape the uterus, whereby he removed a piece of remaining placenta. I was also informed that, with the exception of a great deal of prostration from the loss of blood, she was now better and that the woman and her friends were congratulated by the physician that she had not died under the circumstances. However this may be, and, whether or not it has any pathological bearing in this instance, all I have to say is that the placenta, which was discharged spontaneously at the time of birth, was thoroughly examined and shown to the midwife as one perfect in all its parts. As long as I attended the patient there was not even the shadow of a complaint respecting a discharge from the genitalia,

either bloody or otherwise, nor any other symptoms, that would have pointed to the existence of trouble in that region.

The above three cases are the only ones I have observed out of 193 cases of labor attended by me during the whole of my professional life, constituting nearly 1½ per cent. Just what the true percentage of the occurrence of insanity during pregnancy, labor, and period of lactation is, has as yet not been even approximately stated; certain, however, it is that it is not a disease of rare occurrence, since almost every practitioner has met with cases more or less frequently. The disease has also been known from the earliest times in medical history, but seems not to have received that amount of attention necessary to elucidate its causes and pathology until of late. The speculations regarding its causes and pathology have been many. While, perhaps, they may play a part in the causation of the disease, they are not in themselves sufficient cause, and are called in question by eminent authorities. In 1857 Sir J. Simpson suggested that this affection may be intimately connected with albuminurea. His supposition is based upon the occurrence of four consecutive cases treated by him, in all of which he found albumen present in the urine at the commencement of the attack, but which disappeared after the disease had existed for a few days, in explanation of which he says: "The fire of the disease goes on burning in these cases of insanity, after the lighted match is merely applied, and the strange, morbid clockwork runs on, as it were, after the key that wound it up is withdrawn. I have seen all traces of albuminurea in puerperal insanity entirely disappear from the urine within fifty hours from the access of the malady. The general rapidity of its disappearance is perhaps the principal, or indeed, the only reason why this complication has escaped the notice of those physicians among us who devote themselves with such ardor and zeal to the treatment of insanity in our public asylums. He also thinks that the cause of this disease may hereafter be discovered to consist in certain changes in the renal secretions, involving, secondarily, chemical changes in the blood itself.

Dr. Fordyce Barker has found albumen associated with so small a proportion, that he finds himself compelled to regard it, where present, as simply a coincidence, and not a cause.

Dr. Donkin is credited with the following conclusion: "that the acute dangerous class of cases are examples of uræmic blood poisoning, of which the mania, rapid pulse, and other constitutional symptoms are merely the phenomena, and that the affection ought, therefore, to be termed uræmic or renal puerperal mania, in contradistinction to the other form of the disease.

Again, others, among them Burns and Davis, are of the opinion that puerperal insanity is of inflammatory origin.

Gooch, however, maintains that the disease is not one of congestion or inflammation, but one of excitement without power.

It is difficult to form definite pathological grounds from the observations thus far made. There are no post mortem examinations to confirm any of those so far mentioned, and I am inclined to side with those who seek the seat of lesion or disturbance somewhere within the nervous system, and that the day is yet distant when we will know, if ever, the real pathology of this disease. Indeed, it seems altogether probable that it is only a functional, and not an organic derangement. Cazeaux, in proof of its being a sympathetic disorder of pregnancy, and of difficult menstruation in young girls, cites a case of a young woman in whom a happy change occurred in a pre-existing ailment of the eyes by the occurrence of pregnancy. She had imperfect vision, and was obliged to wear glasses from childhood. Her sight improved immediately after the beginning of pregnancy, and glasses were needed no longer. Esquirol says, "pregnancy, labor, and lactation are sometimes used by nature as a means of curing insanity, though in my opinion this result is rare."

Among the predisposing causes stands first heredity, which has been found to exist in about one-half of the cases observed, and I am able to add one to that list. Next in order we have unhappy domestic relations, as demonstrated in at least two of my cases. Primipara are more liable than the pluripara, especially those who are confined for the first time between the ages of thirty and forty. Complicated and exhausting labor; unmarried women, feeling deeply the degredation of their position; bad hygienic surrounding, general debility, caused either by previous existing diseases or frequent pregnancies, are all mentioned as predisposing by Esquirol. He also states that one-twelfth of the women admitted to Salpetriere were clear examples of this disease, while among the more opulent classes the per cent. was even higher, reaching one-seventh. As exciting causes we find mentioned cold, imprudence in diet, sudden mental shock, disordered bowels; but all may be considered as insufficient. The disease is most apt to occur between the third and seventh month of pregnancy, at labor, and during lactation from the second week to the sixth month and after. Cazeaux states, from the statistics of Marcè, that of 310 cases of puerperal insanity, twenty-seven came on during pregnancy; 180 at delivery; and 103 during lactation. In nineteen it commenced with conception eight times, and in eleven during pregnancy.

The symptoms do not differ materially from those cases which occur unconnected with the puerperal state, with the exception, perhaps, of a certain restless, anxious manner, more or less irritability, and obstinate insomnia. Dr. Ramsbotham groups up the symptoms as follows: At the commencement a troubled, agitated, and hurried manner; a restless eye; an unnatural, anxious, suspicious, and unpleasing expression of the

face—sometimes pallid, again flushed; irritability of temper; impatience; vascilation of purpose; loss of memory; rapid succession of contractions; paroxysms of excessive anger; occasionally sullen obstinacy, listlessness and stubborn silence; impressions that some evil has befallen her husband, or, more often her child; that it be dead, or stolen, or, if it be brought to her, nothing will persuade her that it is her own; she fancies that her husband is unfaithful to her, or that he and those about her conspire to poison her.

Respecting the course and termination, it may be remarked that much will depend upon the particular type of the disease. If mania, perfect and lasting recovery may confidently be looked for; but should it be accompanied by an extreme rapidity of the pulse, grave apprehensions are justifiable as to a fatal termination of the case. (Leishman.) Just how often these cases terminate in death is not known. If melancholia, the course will be of much longer and more variable duration; from a few days to two years may elapse before recovery will take place, but only too often does this form end in permanent insanity, and especially in those in whom it occurred repeatedly, or where we find a hereditary predisposition. Gooch properly remarks that mania is more dangerous to life—melancholia to reason.

Treatment.—The maniacal form, as a rule, does not require any treatment if the attack is of short duration. If, on the other hand, it continues for some time, we may become useful agents to restore the patient, not only to perfect health, but cut short the disease. If the patient be of good physique, blood-letting may be resorted to in any of its forms; if the bowels be loaded, active purgation is indicated. Emetics—ipecac, not antimony—should be given, if the tongue be coated heavily. Opium, although it has been been administered in many cases, should not be given unless it be given in large doses.

Simpson says: "Whatever may be the way in which you give the drug, remember always, as the general rule to guide you in its administration to such patients, that it must be given in very large doses. If you expect to have any good effect from it, you must give, in general, not less than two or three grains of solid opium, or an equivalent dose of some of the cognate preparations."

Dr. Tuke, on the other hand, maintains that from the exhibition of opium as well as other narcotics, no beneficial results are obtained when the leading symptoms are those of acute mania. Suffice it to say, that opium has produced good results, if administered in large doses, in many cases, which terminated in recovery. It should not be given, however, until other sedatives have failed. Perhaps one of the most efficient remedies we find in hydrate of chloral in combination with bromide of potassium and hyoscyamus, if given in moderate doses, and repeated at short intervals until sleep is produced. In all cases should we seek to estab-

lish a regularity of the bowels. Emetics, as well as active purgation, should be avoided if the vitality is low and gastric disturbances not well marked. Vascular sedatives, as one or two drops of the tincture of aconite or the tincture veratrum viridi, may be given hourly, but care must be taken not to push them too far, for obvious reasons. Chloroform also comes in for its share of good results produced in these cases. Warm baths have been employed, with favorable results, when other sedatives have failed to bring about quiescence. Diet should consist of soups in moderation. If the patient be feeble, wines may be resorted to, if not contra-indicated by stomach symptoms, and if the case progresses favorably a more generous diet may be gradually allowed. Seclusion and restraint are important factors in the management of these cases. The melancholic variety will not test the therapeutics of the physician so much. It will not be necessary in most cases to administer nervous or vascular sedatives to the same extent as in the other, but strict confinement and mental quietude are of prime importance, and should be enforced under all circumstances. The patient should never be left alone, from the fact that there is a constant tendency toward suicide, and if, in the progress of the cases, it becomes evident that long duration is probable, or the affection threatens to become permanent, the asylum is the only place to which we may look, with some degree of hope, for final restoration to reason.

Society Reports.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday, April 3d, 1884.

The President, R. A. CLEEMANN, M.D., in the Chair.

Dr. Cleemann made some remarks on the subject of

DIGITAL DILATATION OF THE OS UTERI DURING LABOR.

He had been taught not to dilate or stretch the os uteri with the finger, and for years this early teaching deterred him from making any attempt to supplement the contractile powers of the uterus by assisting in the process of dilating the os. Some time since he was called to attend a primipara, the waters had been discharged the previous day, the pains had continued but the os uteri was very small and the cervical vein hard and unyielding. He felt called upon to interfere actively and tried to dilate the os with his finger; it softened rapidly and in half-an-hour was sufficiently dilated to allow the head to pass and delivery rapidly followed. Since that occasion he has tried the same procedure on several cases and always with gratifying results, the labors being brought to rapid termina-

tions where previously hours had been wasted in weary and painful waiting. The irritable condition of the os which had been lectured upon as the consequence of such interference has not been experienced; no injurey has resulted in any case. The soft finger can do no more harm, if clean, than a Barnes' or other form of dilator, and there is no danger, as in the case of the latter, of pushing the head aside and converting a vertex into a shoulder or other faulty presentation.

Dr. W. T. Taylor, since he had dared to deviate from the teaching of Professor Hodge, had used his finger to assist the dilatation of the os; he did not do so if the cervix was irritable or its edge wiry.

Dr. Githens had practiced digital dilatation of the os uteri throughout his obstetrical practice, a period of eighteen years. He does not confine it to any class of cases, nor does he wait until after the membranes are ruptured. In any or all cases he finds that a "pain" is accompanied by a contraction of the circular muscular fibres of the cervix as well as by a contraction of the longitudinal fibres of the body of the uterus. The contraction of the circular fibres retards the progress of the labor. The intention of the digital distension is to paralyze these circular fibres and thus favor the dilatation of the os. In practice this effect is rapidly produced. One or two fingers are swept around the inside of the cervix, the pulp of the finger being next the cervix, and the latter is pulled away from the head. This operation is kept up during the interval between pains; when the pain occurs the finger is withdrawn; and the operation is repeated in the next interval. The membranes are not ruptured by this process. The irritable condition of the os, if such exists, is subdued. If the rim of the cervix is wiry and thin or hard and thick it softens and yields; the cervix and vagina, if hot and unyielding at first, become cool and pliant; cervical tears are almost entirely avoided, and the time, pain and exhaustion of the labor are reduced to a minimum. The process is useful in every case of labor throughout the first stage.

Dr. Philip M. Scheidt practices digital dilatation largely, his patients say they recognize the assistance it gives them and in subsequent labors ask the doctor to help them. By the great shortening of the first stage of labor, resulting from this method, the use of the forceps is frequently avoided.

Dr. Parvin would be sorry to see digital dilatation adopted as a rule for all cases. The fingers used as recommended do not act only, possibly not chiefly, as dilators, but by evoking uterine contractions. Voluntary efforts at bearing down are not needed during the first stage,—they are dangerous rather than helpful. The method may be useful in some cases after the rupture of the membranes, which is the natural dilating agent. There is also danger of septicemia from germs on the fingers. He does not think the fingers so good a dilator as Barnes' dilator because unequal partial pressure upon the os does not evoke the decided uterine con-

traction that generally uniform pressure does. He thought the danger of a change of presentation by the use of Barnes' dilator very slight. He would prefer a mechanical dilator to the finger whenever dilatation was necessary, but thought something ought to be left to nature. Any sort of interference carries a possibility of danger.

Dr. Elliott Richardson thought there was a possible danger of rupturing the membranes. Our authorities caution us about the introduction of the finger into the uterus and the too early rupture of the membranes.

Dr. Harris remarked that one point had been overlooked. Why does the os not dilate easily when the head is the dilating agent? It is because it is a round surface over which the cervix does not slide easily. On the contrary the finger is applied at successive points. One benefit of the method is that any change or danger is at once detected. The method should not be used indiscriminately and we should not interfere unnecessarily.

Dr. Cleemann would not recommend the method in every case of labor. He has resorted to it in cases where there has been early rupture of the membranes and the assistance of the bag of waters has been lost. In a recent case he saved a patient hours of suffering and the os was not bruised or injured in any way. The sight of any instrument causes the patient much anxiety and the exhibition of the Barnes' dilator and the water, syringe, etc., cause nervous excitement. The bags sometimes burst and thus give the patient a terrible shock with the added discomfort of the escaping water or air. He has always carried them but does not like to use them.

EXANTHEMATOUS DISORDERS IN THE PUERPERAL STATE.

Dr. Parvin had recently an experience of the invasion of measles and scarlet fever in the obstetric wards of the Philadelphia Hospital. In the first case in which measles occurred he did not think that the full term of pregnancy had been reached. Authorities state that premature labor is usually caused, a result of the high temperature of the exanthematous fever. One patient had septicemia in addition but recovered. The infants were not affected. In one case, soon after labor, the temperature rose to 103° and was sent to the fever ward, at the second visit a slight rash was observed which subsequently proved to be scarlatina. Desquamation was very abundant. Albuminuria was very marked on the tenth day; rheumatic pains were also felt; the patient recovered. The child remained well. Children have been born with measles but he did not know of such an experience with scarlet fever.

Dr. W. T. Taylor, some fifteen or twenty years ago, had reported, in the *American Journal of Medical Sciences*, 1853, a case of congenital smallpox. The mother had some febrile symptoms and pain in the back, and the child had the disease, being marked with pits. He had a case of

scarlet fever in a mother two days after labor, it proved fatal in two days; the child lived.

Dr. Harris remarked that in the reports of the Rotunda, Maternity Hospital, in Dublin, are a number of interesting reports on complications of the puerperal period by examthematous fevers. Their mortality has been very materially influenced by these epidemics. Erysipelas is the most interesting and fatal of these complications, in some cases it resembles septic poisoning.

W. H. H. GITHENS, M.D., Sec'y.

EDINBURGH OBSTETRICAL SOCIETY.

Wednesday, March 12, 1884. DR. WILSON in the Chair.

PORRO'S OPERATION FOR A FIBROID TUMOR OF THE UTERUS.

Dr. Barbour exhibited the tumor removed by Professor Simpson.

Professor Simpson then read the following account of the case in which he had performed Porro's operation for fibroid tumor of the uterus:

The patient, in a former case, had after a somewhat tedious and lingering labor, been delivered without instrumental assistance. The child was, however, stillborn. In the present instance she was being attended by one of the students attached to the Maternity Hospital, who had called in the attendance of the house-surgeon, as the case presented some curious points of difficulty. He, in turn, sought the advice of Professor Simpson, who, on visiting the patient, found her in a most wretched condition, in one of the poorest parts of the town. The patient being anæsthetized, and an examination made, a hard body, like the head of a child, was felt nearly filling the pelvis, and on passing the hand further up, the unbroken bag of membranes could be distinctly felt, containing what might be the head of a twin. During her present pregnancy she had suffered greatly from incontinence of urine. She had not been conscious of any abdominal swelling before gestation set in, about the commencement of which she appeared ignorant. Labor pains had set in on the afternoon of the previous day, when she was attended, as before stated, by a student. On inspection the abdomen was seen to present a quite peculiar appearance. The uterine tumor projected far in front of and close to the ensiform cartilage, closely invested by the thin abdominal walls, which were tensely stretched over it. The uterine tumor was nearly in the middle line diverting but slightly to the right side. Just below the umbilicus there was a depression in the abdominal wall, between the uterine projection and a mass which bulged above the symphysis pubis, and occupying the hypogastric and left inguinal regions. It reminded one of an over distended bladder. On palpation the uterus was felt to be almost continuously contracted, with occasional access of fuller contractions. A ridge corresponding to Band's furrow was trace-

able. The lower projection was felt to be solid and continuous with the uterine tumor. Auscultation recognized the fœtal heart sounds already low and feeble, though quite distinct. There was also a hard chancre on the right pudental labium. The inguinal and pelvic cavities were occupied by a portion of the tumor which blocked up the brim, and was diagnosed to be a fibroid tumor growing from the lower segment of the uterus, extending between the layers of the left broad ligament to the side of the pelvis. The partially expanded os uteri could be reached up at the pelvic brim to the right sacro-iliac synchondrosis, the membranes still unbroken. It was clear that the only chance for the woman and her infant lay in early laparotomy. She was ordered an injection of morphia, and preparations were made for her removal to the hospital. Considerable difficulty was experienced in persuading the patient to come to the hospital, but by the aid of a priest she was at length prevailed upon to enter the hospital, but not until much valuable time had been lost, and her chance of recovery very much diminished. When she was at last brought to the hospital she was in a much exhausted condition, and on examination it was found that the fœtal heart had ceased to beat. Drs. Moir, Halliday, Croom, and Angus Macdonald all agreed that the only chance for the woman lay in gastrotomy. The abdominal walls, genitals and vaginal canal having been carefully cleansed and douched with 1 in 2,000 solution of corrosive sublimate, the bladder was emptied, and the urine found to be albuminous. The abdomen was opened by an incision entering two inches above the umbilicus to within two inches of the symphysis pubis, sufficiently long to allow the protrusion of the unopened uterus. A loop of strong cord was carried around the uterus, as far down toward the cervix as the tumor at its lowest segment admitted of, and below the head of the child. The edges of the abdominal wound were kept closely adapted at the back of the tumor, whilst by an incision through the anterior part of the fundus and upper part of the body of the uterus, I reached the cavity and easily extracted the infant by seizing the exposed breach. There was very little hemorrhage, and the turbid contents of the amnion escaped over the abdominal walls. Lawson Tait's clamp was now applied in the site of the constricting cord, round the broad liagaments and lower part of the uterus, and the uterine tumor was cut off above. The section on the right side passed outside the right overy and lower part of the body of the uterus, towards the left side it stopped close to the left Fallopian tube and cut through the left ovary. No fluid had escaped into the peritoneal sac. The long wound was brought together by a series of silk sutures, and the bulk of the tumor, just within the abdominal walls, rendered the adaption of the edges of the wound close to the stump, which was brought through the lower part of it. The stump and the wound were fully dusted with a powder of equal parts of iodoform and bismuth, and bismuth gauze was applied to be abdomen and

bound with a flannel bandage. The patient ultimately died. In some further remarks on the case, Dr. Simpson regretted the fatal result of his case, but said that there was hope in the fact that the mortality from this operation was gradually diminishing.

As a corollary to the above case, Dr. ARNOT, of Bombay, read the accounts of

THREE FATAL CASES OF CÆSARIAN SECTION PERFORMED IN INDIA.

The children were, however, saved. Dr. Arnot made some further remarks on the prevalence of osteomalacia among the Mahomedan immigrants as compared with the Hindoo and Parsee population. Race being an element in the prevalence of the disease.

Dr. CROOM found some difficulty in expressing an opinion on Dr. ARNOT'S cases. He, however, preferred Porro's operation to the old Cæsarean section, as it unsexed the woman, and prevented any further trouble.

Dr. BERRY HART suggested that the shortness of the pedicle left had something to do with the fatal result of Dr. Simpson's case. He admitted that the case was unfavorable. He had seen three cases of Porro's and one of Cæsarean section, all fatal.—*Medical Press.*

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, February 21, 1884.

The President, DR. T. L. PAPIN, in the Chair

Dr. McPheeters said: Mr. President—I desire briefly to report a case of recent occurrence, more for the local interest that it has excited, than for anything peculiar in the case itself:

I was called February 14, to see Mrs. P., a lady twenty-six years of age, in labor with her first child. She had been a perfectly healthy woman during the whole period of her pregnancy; had suffered no pain, no nausea, no unpleasant symptoms whatever. She had taken a great deal of exercise and, to conceal her pregnancy, has laced too tightly. I cautioned her against this several times, and insisted that she should relinquish her corset. She did not do so, however. Her parturition was due between the first and fifteenth of March. I was enabled to arrive at considerable degree of certainty on this point, owing to be absence of her husband. The birth actually occurred two weeks too soon. A week ago to-night the waters broke spontaneously, without any pain; she was awakened from her sleep about four o'clock in the morning by the gush, and I was summoned to see her before breakfast, found her without pain, and told her that nothing was to be done but to keep quiet and await the operations of nature. I saw her again during the day, but there was still no pain. About nine o'clock that night pains set in, though not vigorously. The os was slightly dilated, but dilatable; the pains continued,

and about twelve o'clock became more decided, until about four o'clock A. M., February 15, when the child was born without any difficulty. During the last two pains, when the head was pressing on the perineum, I gave her a whiff or two of chloroform. She was not brought under the influence of the anesthetic, but it slightly modified the pains. After the birth of the child the placenta came away without any difficulty whatsoever, with the aid of a little expression. I held it up by the cord twice and let it fall in vessel, and saw that the membranes and the perineum, to see whether there was any laceration; there was none at all. After the delivery of the placenta I administered two-thirds of a teaspoonful of ergot in a little water, and after remaining an hour left her. About 11 o'clock A. M. I visited her again and found her very comfortable. There were no after-pains at all. I enjoined strict quiet and rest. I saw her again in the afternoon, and she was still very comfortable. About one o'clock that night, while using the bed-pan, she was taken with a rigor—not very severe or long continued, but distinct, and followed by high fever. This was about twenty hours after delivery. I saw her in the morning before breakfast (Feb. 16), and then found her with high fever, her pulse 100, her temperature 102°, and there was some tenderness over the region of the abdomen, but no distension.

The lochial discharge was abundant, of good color, and absolutely odorless. I then learned that during the day of Friday (this was Saturday morning) she had written some half dozen or more letters and had seen some of her friends. I told her that this was exceedingly imprudent, and contrary to my express instruction. Three days before she was confined she took a Turkish bath. I put her under treatment, using turpentine stupes over the abdomen and warm applications, and gave her at intervals of two hours pills containing each a grain of opium, two and a half grains of quinine, and a grain of calomel, which she continued to take during the day. I visited her several times that day, but there was no material change; at night the temperature had come down to 100°, and the pulse about the same figure. On Sunday morning (Feb. 17) I found her about the same as the day before, but with intense thirst. I should have said that she had this intense thirst from the time that she had the chill, followed by fever. On Sunday morning (Feb. 17,) her temperature was 102°, and her pulse, as before, 100. On Sunday night her temperature had come down to 100°, and her pulse raised to 110. In the meantime, from Sunday to Sunday, there was some tympanites, though it was not excessive, while the lochia continued abundant and inodorous. During the day she had two operations—one small, the other a large easy one, of a light yellow color and exceedingly offensive. On Sunday afternoon she commenced vomiting every thing she took. She could not retain a teaspoonful of anything; the vomiting was of a peculiar gulping kind. She complained of the bitter and sour taste of the matter vomited, which

smelled sour. I told her husband on Sunday evening that I considered his wife very sick, and that if they desired a consultation it would be agreeable to me. The husband concurring, Dr. Brokaw was sent for, and came to see her at about half past nine o'clock on Sunday night. We then took her temperature again; it was 100°, and the pulse was 110. Quinine was now given by enema instead of by the mouth. The stupes were continued. Before eleven o'clock Sunday night the vomiting had ceased and she was sleeping. She retained the enemata perfectly. During Saturday and Sunday she complained of a little uterine pain, which was controlled by the opium taken. On Monday morning before breakfast the pulse was 100, and temperature 100°. I was then informed by the husband that his wife was not satisfied with our treatment, and that she wanted a change. I told him to gratify his wife, and that I did not wish to continue in attendance under the circumstances, and so left without seeing her again, not wishing to excite her by taking leave. I am perfectly satisfied that there was no septic poison in this case. In the first place the chill came on soon—twenty hours after the birth of the child; there was no laceration of the perineum. I did not examine the mouth of the womb, for I had no reason to suspect that there was any laceration. The lochial discharge, moreover, was unchanged; there was absolutely no fetor about it. The unfavorable symptoms that presented themselves were this intense thirst and the characteristic gulping vomiting. I look upon the case as one of pure puerperal peritonitis.

Dr. Prewitt.—Was there any tenderness over the abdomen?

Dr. McPheeters.—Yes, there was some, but it was not excessive. I desire to say, Mr. President, that I am certain—and I differ with Dr. Thomas on this point—that there are cases of puerperal fever which are not septicemic; as there are forms of fever other than remittent and intermittent. In this case I do not see any indication of septic poisoning; the symptoms were not such as would point to septicemia. The mind was clear, and the tenderness and tympanites gradually became more marked. I had not for weeks had a case of scarlet fever, diphtheria or eysipelas or any other form of infectious disease. This is a brief history of the case so far as I know it. The patient died on the 21st under homopathic treatment—three days after I had left. No forceps or other imstruments were used. I will simply add that on Sunday afternoon the lochial flow was a little diminished, and although devoid of fetor I ordered the vagina washed out with a warm solution of corrosive sublimate, one to one thousand parts. If there had been any necessity for it, I should have used not only the vaginal but also the uterine douche, but there was no indication for this. I conclude that there was no possibility of septic poisoning in this case.

Dr. Briggs.—Dr. Maughs was called at one o'clock A. M. this morning, to see this lady, being informed there was no physician in attendance,

and the messenger, as he walked over to the house, told him that the patient had had althogether twenty-one grains of mophine. He examined her and found the pulse 130, and the respiration varything from twelve to fourteen, the heart laboring and capillary circulation failing.

Dr. McPheeters.—How long was that after my report terminates?

Dr. Briggs.—This was at one o'clock on Thursday morning.

Dr. McPheeters.—I left on Monday morning.

Dr. Briggs.—It was Dr. Maugh's impression that she was profoundly narcotized, and that if she could recover from her disease, she would not recover from the narcotic. She was enormously tympanitic, and was plainly death-stricken. Dr. Maughs withdrew from her room with Dr. Boisliniere, to talk over the case, and while doing so the patient died.

Dr. McPheeters.—I wish to exhibit a little specimen from the child that was born in the case above mentioned. The child was born at four o'clock on Friday morning, all that day suffered with colic, and in the evening when I saw it, it had had no operation. I gave in a little sweet oil, and after that it had several black operations. On Saturday morning, twenty-four hours after birth, it passed what I here show. At first I thought it was some form of parasite, but it has proved not to be one. It was mixed with the feces, which were of a dark bilious color, and around it were hairs. It unquestionably came from the bowels of the child, and my next impression was that it was dermoid in character. As you see, it is about eleven inches long, round, and of the size of a crow's quill. Dr. Ford was kind enough to examine it with the microscope, and he finds that it is of a membranous character. The hair was associated with it, and evidently came also from the bowels of the child. The child is still living, but is not large or vigorous, weighing about seven pounds. My opinion as to the cause of the death of the mother is that it was caused from peritonitis, which in all probability commenced before labor, as a consequence of undue pressure caused by tight lacing.

Dr. Papin.—What was your prognosis when you left this patient?

Dr. McPheeters.—I told the husband on Monday morning before I left, that I considered his wife a very sick woman, but that the symptoms were a little more favorable, that there was a chance for her to get well.

Dr. Papin.—Would you have given twenty-one grains of morphine?

Dr. McPheeters.—I most certainly would not.

The Tarnier Forceps.

Dr. Yarnall.—If an inanimate object could be said to possess intelligence, the Tarnier forceps would rank high among the intellectual creatures; so marvelous is the action of this instrument that I deem it one of the greatest inventions of the age.

When it is remembered how complicated the mechanism of labor is, we will understand the difficulties to be overcome in devising instruments that automatically assist labor.

In studying the action of these instruments, one realizes the profound knowledge of the mechanism of labor, the patient industry, the close observation and genius that step by step through progressive stages, has from a primary conception, as represented by the needle pointing instrument, developed, simplified and perfected what we now have in the "Axis traction forceps." The intermediate efforts of its inventor are also here, showing the successive modifications and defects that have been overcome. We naturally ask, will the instrument be made still more perfect? It is impossible to answer. It is now very complete.

When applied, and traction is made, it automatically directs us, so that we may never for a moment pull in the wrong direction, following the ever changing axis of the pelvis as the head descends. Could anything be more ingenious, more wonderful? Those who have never used this forceps may ask the question, will it do all I have stated? I answer in the affirmative emphatically—It will. Read the paper of Alex. R. Simpson on its use; better still, use it yourselves and decide.

The Tarnier forceps is as far in advance of the ordinary forceps as this is in advance of the vectis. All forceps, the Tarnier included, should be applied (except in very rare instances) when the head is thoroughly engaged in the pelvis, and the os dilated. There are cases in which it is advisable to apply the forceps, even when the head is not well engaged in the superior strait, or when the os is not completely dilated, but they are very rare, and I will not discuss them.

The Tarnier forceps should and will supersede older instruments; it is correct in principle and practice, and far in advance of all others. I am happy to be able to state that to some extent at least I have the endorsement in my views on this subject of our able ex-president, Dr. L. C. Boisliniere, and also of our President, Dr. T. L. Papin, both having had practical experience with these instruments. I await with deepest interest their future opinions after further trial, and of the members of the Society who have yet to test them.

Unfortunately, we are apt, when accustomed to the use of certain instruments, to apply them rather than resort to new and untried ones, unless the case is so difficult that old methods fail, and in testing new forceps, it is proper to take ordinary as well as extraordinary cases, easy as well as difficult ones, that the comparison or tests may be just, and that experience may be obtained and a correct estimate formed.

When I first used the Tarnier forceps I had a very difficult case of impaction, and a high position. I delivered with ease, and laid the instrument aside, intending to use it only in the next very difficult labor. In the meantime I used a Hodge, as was my custom, never thinking that the new instrument should be applied in ordinary as well as difficult cases. Recently, however, I resort to the Tarnier exclusively, and apply it with the greatest ease. Each time I use it, I more thoroughly appreciate its

superiority; there is no comparison between the axis traction and the forceps of the old style. The former, I am convinced, will come into general use sooner or later.

The automatic action of the Tarnier forceps relates to rotation as well as to the axis of the pelvis, hence the instrument nearly approaches perfection.

Dr. Coles.—Do you hold the upper handle in your left hand?

Dr. McPheeters.—You do not hold the handle at all. It is often said that a great deal of injury is sometimes done to the child's head by the pressure of the forceps, especially sudden pressure. In my experience I have rarely seen the child injured by any such sudden pressure. I think that is more theoretical than practical. The forceps can be pressed tightly and does not seem to hurt the child. The action of Tarnier's forceps is automatic, if we pull they follow the pelvic axis.

Dr. Yarnall. — Dr. Barret and I were talking of the applying of the forceps in relation to the child's head; the fact is the forceps are usually put on in relation to the pelvis.

Dr. Boisliniere. — The object of the Tarnier forceps is to solve a great problem in obstetrics, viz.: to get the child down in the direction of the superior strait. When the head of the child has come into the excavation and rotation is going to take place, any forceps and every forceps has some merit. There is no perfect forceps. When the head is at the vulva, and is about to be born, any forceps will answer. I can deliver a woman with a pair of tongs if I have nothing else at hand, but the great problem is how to get the child down into the axis of the superior strait.

Now if the woman had no perineum, the problem would be very easily solved.

The pelvis is a very contorted conical cavity. I say there is no perfect forceps, because a forceps which is appropriate at one point of the pelvic passage is not so at another. The object of Tarnier was to realize a forceps that would bring the child down from the superior strait. The invention of Tarnier has been suggested by many writers. For instance, I have a book which contains a plate where a Belgian writer suggests a vectis—this book is 100 years old—which is upon the same principle as Tarnier's forceps; his object was to apply traction downward, like Tarnier, and so to draw the head throngh the superior strait. By the use of this vectis the head could be shelled out into the superior strait, where forceps can be used. The difficulty is in getting the head down. The idea of this Belgian was to apply the vectis in this way, and then, instead of using it as a fulcrum, and injuring the soft parts, to make traction downward with his vectis. Tarnier proposed to invent an axis traction forceps with which he could get the head down into the excavation, at the same time having a sufficient pelvic curve to protect the perineum. His idea was to get rid of the pressure on the perineum, and in order to

do this he first invented this forceps with the needle; it is admirable for the purpose, and will readily bring the child down into the excavation. The objection to this forceps is that when the head gets into the excavation the great pelvic curve endangers the perineum. When the head is in the excavation the forceps should be changed. I am always afraid of rupturing the perineum by using a forceps with this great pelvic curve. There is Wallace's forceps, and Hubert's, a Belgian physician; here is Davis' forceps, with an immense pelvic curve; here is Wallace's forceps, that will act pretty much like Tarnier's — what we call a regulation forceps.

Dr. Coles. — When you apply the forceps in the superior strait to the child's head, do you apply it obliquely?

Dr. Boisliniere.—At the superior strait there are two points which are not touched by the head. We apply the forceps not transversely nor obliquely, but in the diameter which we would call intermediate. When we apply the forceps transversely, we find a mark upon the frontal bone and another on the occiput. You will never find this to be the case when the forceps are applied in these two places which are not occupied by the head of the child, but the child will be caught in the intermediate diameter.

Hodge's forceps to be perfect should have a greater pelvic curve. This forceps of Edgar does very well when the child is in the excavation. The difficulty with the Tarnier forceps is that when the head is ready to be born there is danger to the perineum. When the head is being born, Tarnier himself takes hold of the forceps with both hands, and delivers very gently, so as to prevent injury to the perineum.

Here is an old forceps which has been in use two hundred years. It can be used when the head is in the excavation. It is an admirable forceps when the head is in the superior strait, but any other forceps will do the same work, and I think Hodge's forceps would be much safer.

Dr. Engelmann was kind enough to bring the forceps which his father used. Here is a Comstock forceps, it is very much like Simpson's. Simpson has no right to have a forceps, as he uses it very rarely. We ought to handle this old forceps of Dr. Engelmann's with great veneration, as it is the forceps that was first applied in the Mississippi valley in 1831; Dr. Engelmann and afterward Dr. Wislizenus were the first men to apply forceps in St. Louis, and with great success. That forceps will not do in the superior strait. It has an advantage over Hodges'. Hodges' is too elastic, and will frequently slip. You feel a great deal more security with this one. Neagele's is a splendid forceps. Here is the old Baudelocque forceps. It is said when Simpson went to Paris they showed him this, and he said, "Well, is this for a cow?" Here also we have the Hamilton forceps, a curious little arrangement, which will do very well when the face is posterior.

Dr. Briggs. — Have you ever had a rupture of the perineum in using the Tarnier forceps?

Dr. Boisliniere.—No, sir, I never have.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF CINCINNATI.

Stated Meeting, March 13, 1884.

The President, Dr. C. O. Wright, in the Chair.

Three Cases of Puerperal Insanity with Remarks upon the History, Causes, Pathology and Treatment of this Disease.

Dr. Gustav Zinke read a paper on this subject (see page 169).

DISCUSSION.

Dr. Palmer remarked that the cases reported by Dr. Zinke were interesting, as illustrating the usual modes and times of the manifestation of the disease called puerperal insanity. This is a disease which was different in its causes and symptoms according to the time of its development. Authorities are in the habit of speaking of a form coming on during pregnancy; that during labor; and that after parturition, or during lactation.

During pregnancy the disease usually partakes of the form of melancholia, and we must look to the conditions incident to pregnancy as exciting. As to heredity, a large number have such a predisposition. The parent on either side need by no means have had insanity itself; it is sufficient if there has been some neurotic disease, as chorea, epilepsy, migraine, hysteria, etc., for nervous diseases manifest different forms in successive generations. These are the predispositions and some such factor enters into the etiology of the larger proportion of all cases. The peculiar blood state of pregnancy, the nerve state of pregnancy, the reflex irritation of the gravid uterus, and the presence of effete products in the blood, produced by pregnancy, with its defective elimination, are the immediate exciting factors. Some grade of melancholia possesses the mind of most pregnant women; only the aggravated forms excite attention. The theory of albuminuria, or rather its common associate uræmia, producing puerperal insanity is not proven. The presence of this condition is not sufficiently constant to demonstrate any such relation as cause to effect in all or in most cases. However, it is not improbable that uræmia and also septicemia may, under certain favorable circumstances, prove an exciting cause. Mental and emotional disturbance are very frequently the immediate causes to which an attack can be traced.

Occurring some days or weeks after parturition, the condition known as cerebral exhaustion would seem to explain most cases. Anxiety, pain, loss of blood, little sleep, insufficient food, and free lactation, are condi-

tions very often seen after parturition. They are causes which lead to, and imply, brain and nervous exhaustion. Two things, above all others, are now needed, *sleep* and *food*; to quiet the brain excitement and secure sleep, by chloral and bromides (seldom opium), then freely nourish the patient, at the same time withdrawing the infant from the breast, these are means which are attended with the happiest results.

He did not believe that there was any distinct or constant pathology in puerperal insanity. As a rule, if death follows (a rare matter and then only in maniacal cases, or when suicide was committed), no special pathological lesion will be detected; no hyperemia, no effusion, no lymph, no evidences of meningitis. Rather generally the brain will be found anæmic. Puerperal insanity in the form of mania generally indicated sthenic, while, if melancholia, asthenic conditions. In either instance, it must, as a rule, be regarded as a functional disease, that is, without structural lesions. In a few rare cases these may be found, and then, probably, they are secondary.

Dr. G. S. Mitchell agreed with the gentleman who had just spoken, that heredity plays the most important part in the causation of this disease, as almost every case will show this to have been the prime cause. If she inherit this nervous tendency, she may go through life without showing it, unless pregnancy supervenes, when there will be manifestations of insanity. Pregnancy is the great physiological test both of the mental and bodily soundness.

He had seen but one case in his own practice occurring during lactation. In this case the patient went on from bad to worse, and finally died of acute mania.

As the essayist has pointed out, the remedies are chloral hydrate, potass. brom.; in melancholia, opium and hyoscyamus perhaps promise more. Chloral hydrate is the remedy employed by alienists.

Dr. Dunham believed also that this disease depended more on heredity than any other cause, while pregnancy may be considered the exciting agency.

He did not agree with the statement that aged primipara are more frequently subject to this disease, in fact he did not remember ever having a case occur in a primipara at all.

He considered chloral hydrate and potass. brom. the treatment *par excellence*. In his early experience he had used opium in these cases, but of late had discarded it altogether. He usually prescribed the bromide in the daytime and the chloral at night. He had never had a patient die of puerperal insanity.

Dr. James G. Hyndman remarked that his personal experience with the disease in his own practice was limited to one case, occurring in the eighth month of pregnancy, and taking the form of melancholia. He was lead, by the long-continued headache, to examine the urine, and

found albumen. While there was no hereditary taint of insanity in the family, the patient had been subject, and is yet, to attacks of chorea, lasting some three or four weeks at a time. He would like to ask if there are any statistics as to the comparative frequency, before and after delivery, of these cases where heredity is recognized as a factor.

Dr. George E. Jones recalled the case of an Irish woman whom he had had under his care in 1861. The labor was normal in every respect, but shortly after he left the house the woman in attendance, contrary to his orders, submitted her to a most thorough bathing. In two hours after she was a raving maniac. There was a history of insanity in the family, however, her mother and an aunt having died of the same disease. Dr. Bonner was called in, and the patient put upon the use of hyoscyamus and chloroform—chloral was not used then as now—but she became almost unmanageable, and in three or four hours died. He met with mild cases occasionally, but had witnessed no case of any importance in his own practice since the one just reported.

Dr. Cleveland said that he had frequently seen such cases as the first one narrated by the essayist, but he had not classed them among the cases of puerperal insanity, but simply considered them cases of temporary aberration of the mind. He had found them of especial frequency when there is dystocia.

Dr. Reamy said that an inference might be drawn as to whether this disease is functional or organic from the statistics quoted. It has been stated that one-eighth of all cases of insanity confined in asylums are due to puerperal causes. If we take into consideration that most of these have received treatment in private practice, before sending them to an asylum, we must infer that they have lasted long enough to have become chronic. When met with in these institutions the conditions which produced the insanity, viz.: pregnancy, labor and lactation, are absent, and the functional causes thereby removed. He considered the statistics contradicted the statement that puerperal insanity is a functional disease.

That a considerable number of cases of acute mania in both men and women may be called functional is true, but in well marked cases we have no more authority for considering the disease under discussion as functional than any other form of brain trouble which may occur.

He referred to the comparative frequency of this disease in different countries and hospitals. In Würzburg, for instance, according to the statistics of Barker, the proportion is one case for about 1400 cases of confinement, while in this country the proportion is about 1 in 400.

The fact that most of the cases of puerperal insanity occuring in hospitals are among unmarried primiparæ and the social ostracism that is visited upon the heads of these unfortunates in this country is considered by Barker as sufficient cause for the greater number of cases here, while in Germany where a woman does not lose caste, she is not subject to the

moral emotions that undoubtedly play an important part in the etiology of the disease. He thought there might be something in the constitution of these German women that rendered them less liable to this disease.

He considered heredity an important feature especially when tracable to the mother's side. It may not manifest itself in her case as insanity but may take the from of any of the neurotic disturbances. In his own experience he had had no case occurring during labor, but of some fifteen cases in all, that he had seen, eight or nine occurred subsequent to delivery, the others during pregnancy.

He considered chloral hydrate the most striking agent that could be employed owing to its calmative and hypnotic effects. Bromide of potassum had very little of any effect except in a few cases.

Dr. Palmer, in reply to the criticism of his statement that puerperal insanity was almost always a functional disease, said: By the term functional is meant a disorder of function, without any structural alteration that can be detected by sight, or sight aided by the microscope. It is true, molecular changes occur when function is disordered. So they do, also, in the performance of all physiological action. It is perfectly proper and scientific in expression to make use of the terms functional and organic as founded upon this basis. They are terms necessary to express varieties and grades of disease, and have a common and well-understood meaning.

The fact that organic changes have sometimes been found in old cases dying in asylums, is not inconsistent with the idea that the disease is a purely functional one at the start. Long continued perverted function of the brain, as elsewhere in the body, may, in time, lead to structural changes, a clinical fact recognized in all our studies of different parts of the body.

If, as Tuke says, puerperal insanity covers one-eighth of all cases in asylums, and as a majority of all cases recover under home treatment, before removal to an asylum, the disease must be not infrequent.

Dr. Gustav Zinke, in conclusion, remarked: The most important criticism upon my essay was made by Prof. Reamy. I preferred to call this disease a functional nervous disorder because, so far, no post mortem changes characteristic of it had been found. In the strictest sense of the word, however, we have no functional affections; but because we cannot observe any changes from the normal in certain diseases we are still content to adhere to this term for want of a better one. In reality then it is an organic disease, and therefore subject to chronicity and incurability in consequence of temporary or permanent changes somewhere; where, remains to be shown in the future. May not, in puerperal insanity, incurability be brought about by *atrophy from disease* of those parts of the brain that preside over its harmonious or intelligent action?

In reply to Dr. Mitchell, who believes that in all cases an hereditary

predisposition is to be found, I will simply say that, in many cases reported, on the closest inquiry heredity could safely be excluded. It is easy enough for us to make assertions and dispose of a question in that manner, but naught is proved by it except our own ignorance. Let us rather go with Simpson and other investigators; prosecute the points they gave us or seek to find others that may finally lead us to a permanent settlement of this question. I believe that insanity, puerperal or otherwise, as well as cancer in any part of the body, will occur primarily. If not, how did they ever make their appearance? We must admit some people are born insane, yet, in such, insanity is manifest from the beginning of life and is more or less marked. But, in puerperal and other varieties of insanity, we find only too frequently that individuals become affected who were previously noted, indeed, for their high degree of intelligence and evenly balanced action. It seems to me that there ought to be a cause or causes, other than that of heredity, to explain the sudden or gradual change from a healthy to a diseased action of the brain.

Dr. Gustave Zinke presented the specimen of a

PERFECT OVUM ABSORBED AT THE END OF THE FOURTH MONTH.

The woman was thirty-eight years old, and in her second pregnancy.

He had been called three days previously, at night, to see her two year old boy, suffering from pseudo-croup. The child, as was predicted, did well, nevertheless the mother was badly frightened, and exhibited throughout a great anxiety.

On the morning of the third day he found her with all the clothes on, lying upon her bed. Her husband brought the chamber, saying that this morning, about 8 o'clock, his wife was suddenly seized with pains in her bowels, asked for the chamber, and dropped this (the ovum as above stated) into it. The woman had experienced no pains either before or after the abortion. She lost but a few drops of blood. She was urged to keep her bed for a week, but nothing could persuade her so to do. She went to work the same day. Two months have elapsed since it occurred, and she enjoys excellent health.

NEW YORK ACADEMY OF MEDICINE.

Meeting of April 3, 1884.

The Vice-President, H. T. HANKS, M.D., in the Chair.

THE REMOVAL OF THE PLACENTA.

Dr. J. H. Garrigues read a paper on this subject. He did not propose to consider abortion cases. The method which he practiced was that of Credé, described as long ago as thirty years. It was eight years since he had adopted it; when he became connected with the Maternity Hospital it was introduced into his service there, and had given entire satisfaction.

In one year 408 women were delivered; two of them aborted in the fifth and sixth months respectively, and the placenta was removed piecemeal by means of the dull-wire curette and the forceps. Among the remaining 406 there were six cases of retained placenta, and in six the membranes had to be removed after separation of the placenta. Therefore, out of over 400 cases in which Credé's method had been practiced, in only six had it failed. In four there existed abnormally intimate connections between the placenta and the uterus, and it might be taken for granted that in those cases any amount of pulling on the cord would not have brought the afterbirth away. In six cases, or one and one-half per cent., more or less of the membranes were retained; in one of these the whole hand was introduced into the uterus in order to remove them; in the five others the index and middle fingers were employed for this purpose, and no trouble was observed in consequence. Credé had not observed any bad result arise from leaving the membranes in the uterus, and would not advise their removal, as the introduction of the hand might cause infection. Dr. Garrigues had seen very serious post-partum hemorrhage occur in such cases, and instructed his assistants to remove any part of the afterbirth, whether placental or membranous, which was left in the uterus. Antiseptic precautions being used, the danger from removal of such parts was comparatively small. He formerly used solutions of carbolic acid, a five per-cent. solution for the hands and a two-per-cent. solution to be thrown into the uterus. Since October, 1883, he had employed a solution of bichloride of mercury, 1 to 2,000.

Credé's method helped nature by her own means; it only increased the strength of the normal contraction of the uterus by which the placenta was expelled. When the third stage of labor was left to nature's own efforts, in some cases expulsion followed immediately upon the birth of the child; in the majority more or less time intervened after the birth of the child before the placenta was thrown off; more or less blood collected in the membranes, and was afterward pushed out in the form of a clot and fluid blood, and in some the placenta did not come off at all. Help was therefore called for. Dr. Garrigues divided the muscles of the uterus into two groups, the proper and the common. The first approximated the walls of the organ; by the second it was drawn backward into the pelvic cavity, and at the same time it was tilted in such a manner by the coöperation of the round and utero-sacral ligaments that the fundus moved forward and the cervix backward, while all the lower bundles probably contributed to the expansion of the os. All these movements were closely imitated by Credé's method. By shortening the third stage of labor, and by increasing the muscular contraction, Credé's method counteracted the tendency to hemorrhage both immediately, during the third stage, and after labor. During the period at the Maternity Hospital mentioned they had only had two cases of post-partum hemorrhage,

besides two in which there was a moderate amount of blood lost. In both the cases of post-partum hemorrhage the bleeding began immediately after the birth of the child, before Credé's method could be practiced. Both patients were exhausted, and the latter had blood extravasation all over the body, the case being one of purpura hemorrhagica. In no case had post-partum hemorrhage occurred after the expression of the placenta. When properly executed, Credé's method for the expulsion of the placenta was the best for the prevention of post-partum hemorrhage. Inversion of the womb was prevented, but it could not be too often repeated that the uterus was seized from all sides over the largest possible space, and downward pressure on the fundus should never be practiced, except when the womb was contracted. In some cases the whole afterbirth was expelled by this method outside the genitals, and, when not, the membranes could be withdrawn from the vagina without introducing the finger into the canal. In this way the method became a part of the preventive antiseptic treatment. He placed the patient on the left side during delivery, but after the birth of the child she was turned on the back, which was the more convenient position in which to practice Credé's method, or, in case it should prove necessary to do so, to compress the aorta or make intra-uterine injections.

Credé's originality in introducing this method had been questioned, but Dr. Garrigues had not been able to find that it had been previously described and practiced in all its details by any author.

The distinguishing features of Credé's method were:

1. That it was to be used in all cases.
2. That the uterus was to be grasped from all sides with both hands.
3. That the placenta was to be squeezed out by the outside pressure during a uterine contraction.
4. That the cord and placenta never were touched, except in those rare cases in which the placenta was really adherent, and had to be peeled off from the uterine wall.
5. That the fingers were not introduced into the genital canal after delivery, at which time the danger of infection was much greater than before the passage of the child.

The advantages of this method were:

1. The certainty with which the end was accomplished.
2. The exact imitation of the natural processes.
3. The prevention of hemorrhage.
4. The prevention of hour-glass contraction.
5. The prevention of inversion.
6. The prevention of avulsion of the cord or of the uterus itself.
7. The prevention of infection.

Dr. Garrigues thought it unnecessary to say anything about the old method of pulling on the cord, as it was attended by corresponding dis-

advantages. As to the let-alone method, by which no interference with the processes of nature whatever was made, not even removing the placenta when it lay loose in the vagina, a method practiced by some obstetricians in Germany, he thought there was nothing to be said in its favor. Of one hundred cases treated in this manner, it was recorded that in twenty-four the placenta came away within half an hour; in twenty in the second half-hour; in twenty-five in the second hour; in eleven in the third hour; in nine in the fourth; in five in the fifth; in three in the sixth; in two in the eighth, and in one in the twelfth hour. Behind the placenta blood-clot formed, in one case there was a decided fœtid odor present, and in two hour-glass contraction took place. This method was not of that nature, as we alleged. The placenta was artificially prevented from coming out by keeping the patient lying on her back. It was presumable that in the natural state the woman would, shortly after the birth of her child, get up and move about, and thus an opportunity would be given for the discharge of the placenta from the genital canal within a short time after the second stage of labor. Total expectancy, in his opinion, had many disadvantages and hardly any redeeming qualities. All savage tribes used massage and expression, and even the elephant, whose labor had been observed by Dr. Sussdorf, pressed its womb against a post in the ground.

Dr. A. S. Hunter fully indorsed the conclusions given in the paper. He did not know that he could add anything to increase the appreciation of Credé's method, but he would suggest that it be begun just before the expulsion of the child. It had been his experience since he had adopted this course that the uterus had followed up its contraction firmly upon the placenta, and that the period between the expulsion of the child and that of the placenta had been very short. The amount of hemorrhage which usually followed manual aid in the removal of the fœtus was, in his opinion, by this means much diminished.

Dr. A. Hadden said that during twenty-five years of considerable obstetrical practice he had never lost sight of the importance of proper attention to the third stage of labor, and the results of his experience he thought abundantly proved the wisdom of that course. Out of the last thousand cases which he had attended, the satistics of which he had examined during the past few days, he found only one case of death from hæmorrhage. In that case there was purpura hæmorrhagica, and the patient died a few hours after of the rupture of a very large varicose vein. In one case death occurred from paralysis of the diseased heart after a difficult labor; in one from rupture of the uterus; in one from an abscess a few weeks after childbirth. The practice which he had adopted for the removal of the placenta consisted partly in pressure upon the fundus of the uterus, or Credé's method, and partly in traction upon the cord. He always took pains to have the uterus firmly contracted and present a

globular form, and he watched the patient an hour and a half after the expulsion of the placenta. He was a little skeptical about slight traction favoring inversion of the uterus. He had always practiced it, and had never known it to produce any such effect. He had had but one case in which partial inversion took place, and in that instance it had begun, as indicated by a hollow in the fundus, before anything was done toward removing the placenta. The attachment had been at the fundus, and not, as was usual, on the sides.

Dr. M. Putnam Jacobi thought there was no question but that Credé's method was the best for the removal of the placenta. She would only refer to two theoretical questions which has been suggested to her mind by the paper. As the completion of pregnancy approached, nature began to prepare for the throwing off of the uterine contents. This, she thought, was done by supplying increased arterial for venous circulation, for it was arterial blood which favored muscular contraction. The veins began to become closed by the formation of thrombi and the coagulation of blood within them. Credé's method tended to diminish the size of the uterine cavity and thereby to diminish the size of the veins and cause their obstruction by thrombi. The other theoretical suggestion was, that the construction of the placenta in the human female rendered her more liable to danger than the lower animals, and this fact might be one of nature's provisions against an over-increase of the population.

Dr. P. F. Munde had found Credé's method a very excellent one, and free from danger when carried out aright, but, when carried to too great an extent, or applied in a manner which the originator had not intended, it might cause too rapid expulsion of the placenta and favor inertia. He had found the best method to consist in making gentle compression with the hand on the fundus of the uterus, beginning with the expulsion of the child's head, and continuing it until the uterus, which at first reached perhaps as high as the umbilicus, extended up no more than half that distance, and assumed a globular form, indicating that the placenta had become detached. In some instances it would be found that the placenta lay in the cervical canal after its detachment, in which case he would not hesitate to insert the whole hand, properly disinfected, and remove it. Care should be taken at the same time to tear off the membrances. The placenta could not be expressed until it was detached, but the uterus could be made to contract by manipulations and detach the placenta, after which it could be expressed. He had met with the condition called encystment, in which the detached placenta was retained by the contracted cervix. He believed we should always remove retained membranes. He did not think harm would come from gentle traction upon the cord. He did not believe at all in the let-alone method.

Dr. J. H. Fruitnight said, with regard to the let-alone policy, that the placenta should be looked upon as a foreign body, and he could not under-

stand how any reasonable obstetrician could leave it in the genital canal longer than was absolutely necessary. He had not often used traction, but in one case, in which he made what he thought was gentle traction, the placenta separated in the central portion while the circumference was still attached, and it resulted in very troublesome concealed hemorrhage. He thought, as Dr. Mundé had suggested, that there might be some cases in which Credé's method would not be applicable, but the physician would be able to judge of such cases when he encountered them.

Dr. Isaac E. Taylor looked upon everything connected with childbirth as physiological, and not pathological, and he did not think that we ought to interfere with a normal physiological process. He did not believe he had introduced his hand into the uterus to extract the placenta more than six times during his entire practice. The uterus did not always look directly down into the pelvic cavity; its direction varied according to the attachment of the placenta. By making gentle traction upon the cord, it could be determined whether it was attached to the posterior surface, to the fundus, or to the orifice. The physiological method of removing the placenta would be imitated by making gentle traction upon the cord, which would excite the fundus to contract upon the placenta and cause its expulsion. We should not use forced expression, supposing that the placenta ought to be expelled within five or ten minutes after the birth of the child. Nature's method was to wait twenty minutes, or even an hour. She was fatigued and needed rest, and we should not compel her at once, after delivery, to renew her efforts to expel the placenta. He thought the placenta might be attached at such a portion of the uterine wall—for instance, at the opening of the Fallopian tube—that Credé's method would prove of no effect.

Dr. Ramsdell said he was once called to see a patient whose physician had waited forty-eight hours, and the placenta was found to be retained on account of hour-glass contraction of the uterus. Septicæmia followed, and she died. He had practiced gentle traction with friction over the region of attachment of the placenta. Out of over 700 cases of confinement, he had but one death to record, and in that instance, the nurse, contrary to his rules, gave vaginal injections for several days before he learned of the fact. In two or three cases he had been obliged to introduce the hand and tear off the placenta. As it was torn away it caused a sound like that of stripping the kidney of the hog from its fatty envelope. The placenta usually came away within twenty minutes; he did not believe it had ever been detained more than thirty minutes.

Dr. Sell had not practiced any method specially; formerly he had waited from a half to three-quarters of an hour, according to the teaching of Dr. Taylor. In later years fifteen to twenty minutes embraced about the whole of the time from the birth of the child to the birth of the placenta. The method which he had practiced usually was about that

recommended by Denman, before the introduction of Credé's method. But he did not think we need be governed by any absolute standard. It could not be too strongly impressed upon the young physician that he should not be in too great a hurry.

Dr. Garrigues, in closing the discussion, said he thought we should all agree that the physiological process should be imitated as far as possible, but there might be a difference of opinion as to what the physiological process was. To leave the placenta in the genital canal for some hours was certainly not natural. To make traction upon the cord he believed not to be a natural process, and he favored letting the cord alone; it would come away by gentle pressure. As to the case mentioned by Dr. Taylor, of attachment of the placenta around the Fallopian tube, it was probably a case of tubal pregnancy, in which the ovum afterward descended into the uterine cavity. Such cases were very rare, and could not have much bearing upon rules for so common a process as the removal of the placenta. He would not feel justified in introducing the hand into the womb to extract the afterbirth before the lapse of an hour and a half. On the other hand, he did not believe it was right to leave the placenta until it became decomposed.—*New York Medical Journal.*

Foreign Gleanings.

TRANSLATIONS FROM THE FRENCH AND GERMAN.

[Prepared for the OBSTETRIC GAZETTE.]

DIPSOMANIA.—A series of lectures delivered at Asile Ste. Anne by M. Magnan. Translated from *Progrès Médical*, by Joseph Eichberg, M.D.

Hufeland was the first to employ the word dipsomania to designate an irresistible attraction which compels man to drink, at intervals, an excess of intoxicating liquors. Foville recalls this origin of the term in his excellent article in the Dictionary of Medicine and Surgery. In 1817, Salvatori, an Italian physician practicing at Moscow, gave the description of an affection to which he gave the name of oinomania; two years later, a German physician, Bruhl-Cramer, also practicing in Russia, published at Berlin a memoir, entitled Uber die Trunksucht, and discussed therein, not a habit or vice of drunkenness nor the mental trouble produced by the inveterate abuse of spiritous liquors, but rather a paroxysmal and insurmountable inclination to drink. It is in the preface of this work that Hufeland proposes to apply the term dipsomania to an affection, which, he says, is comparable to nymphomania.

But, if we retain this expression, we will soon see that we cannot give it the wide meaning attributed to it by its author. Some years later, in 1825, Dr. Erdmann, from some observations made in Russia, depicted very clearly the paroxysm of dipsomania; and Marcé, who has well studied

the prodromic period, quotes from this last work the curious observation of a Russian laborer, who, although ordinarily a sober man, would, after certain periods of sadness, drink brandy for several days. Carpenter, Esquirol, Magnus-Hus, Forbes-Winslow, Morel, Trélat, Marcé, Griesinger, Foville, Delasiouve and others have described this malady from various points of view, while holding different opinions as to its nosological nature.

We may say for ourselves that we do not consider dipsomania as a morbid entity, or as a distinct disease, but rather as a collection of symptoms, a syndrome, of great importance and well deserving of special study.

The irresistible craving for drink recurs at intervals not clearly determined, in the form of paroxysms, which appear as attacks of a sort of impulsive melancholia. There are in this disease, as in many others, peculiar collections of symptoms, such as the impulse to theft, incendiarism, the fear of dust, the fear of pins, or of bits of glass, the dread of open spaces, the perversion of the genital sensation, etc., which, in the psychic class, are vices of the same value as malformations in the order of bodily troubles. Their very presence argues in the eyes of the clinician, in favor of a congenital predisposition; they form a cortege in the train of hereditary insanity.

Etiology.—Heredity is the predominating factor in the etiology of dipsomania. All the patients we are about to see were, by their ancestry, predisposed to madness. It must, however, be admitted that incidental causes may have a certain influence on the paroxysm, but this influence is secondary, is directed only to the manifestation proper, and has not on the underlying diseased basis the influence one is inclined to attribute to it.

Some authors, Bruhl-Cramer, Erdmann, Magnus-Hus, considered that these paroxysms developed only in individuals who, for a long time, had yielded to alcoholic excesses, rather than that they were only an episode, a phase or single manifestation of a deeper general condition; for them, the paroxysm constituted merely an aggravated consequence of drunkenness.

This opinion, as well as that which makes a distinct disease of dipsomania, will not bear the test of a complete study of the facts. Esquirol, who could see only in the distinct disease dipsomania, one symptom, the need for drink,(1) relates seven observations without going back in any of them to the ancestry of his patients. He takes his patients at the moment where the monomania of drunkenness manifests itself, he describes the

1 The French term *besoin de boire*, is difficult to translate literally. It signifies more than a craving and may be best rendered by *need*, for to the patient the necessity is as absolute as the need for air, for which the French employ the parallel expression, *besoin de respirer*.

paroxysm, without preoccupying himself with the phenomena which have preceded or which follow, or examining the lineal descent; this is merely a detached page in the pathological history of his patient, which cannot be understood if studied by itself.

Great though the admiration inspired by this illustrious teacher, we cannot but regret these omissions. If his observations serve for the description of the symptom, they teach us nothing of the nature and morbid basis of the diseased condition; we must, necessarily go back to the antecedents of these patients, and we then see that, at various periods of life, they have presented oddities of character and intellectual trouble, before being impelled to drink. These troubles are the index of a mental condition more deeply affected than one would suppose from a study of the isolated symptoms.

In dividing up the history of any insane patient, it would be very easy to find in his case several distinct monomanias.

Other authors have confounded the symptoms of dipsomania with those which they think produced it; the functional troubles of the stomach, such as dyspepsia, which have been considered as cause of the impulse, should be regarded differently; they are, on the contrary, really but a consequence of the disease, of which they become, so to speak, a constituent part. The same may be said of certain, badly defined, strange conditions, to which the name of the hysterical state is too easily applied, and which are in reality but the usual condition of dipsomaniacs; the same will hold good for the depression and sadness which, far from being the cause of the paroxysm, are only its first symptom.

Menstruation and the menopause have been accorded a very important place in the etiology of dipsomania. Without wishing to consider menstruation as devoid of influence on the malady which occupies our attention, it should be stated that its action is only manifested on the paroxysm, whose return it sometimes favors. Besides, this may be explained by the disturbance that woman undergoes during the catamenial period. In a certain patient whom I shall present to you, it will be easy to see that, if menstruation has some influence on the periodicity of the paroxysms, it would be an exaggeration to pretend that it is the cause of the disease. We shall present her at once, for her history will be a sort of sketch for you, in which you may follow the different characteristic phenomena, which we shall have to discuss.

Marie D., aged forty-five years, suffered from melancholia since the death of her husband, dating back four years. At times, but particularly in the last eighteen months, she feels herself overcome, at intervals, by an urgent need for drink; a deeper sadness, a feeling of discouragement, a sentiment of helplessness precede each of her attacks; she complains of a constriction in the stomach and neck, which is renewed each time the impulse manifests itself. At first, she forces herself to overcome

this need, she reproaches herself, but, incapable of resistance, she runs to the wine-house, where she furtively purchases liquor, which she conceals, carries to her room and shuts herself in to drink.

The sadness soon increases and the alcoholic phenomena appear; there is loss of sleep, and distressing hallucinations supervene; she sees figures making grimaces; death's heads, whose eyes move; flames and lightning; surrounding objects appear colored red, blue, green and begin to dance; she sees butterflies of all colors in various directions; she hears menacing and insulting voices; finally, she feels pricking of the skin, which she attributes to vermin.

All these phenomena, which rapidly grow less marked, disappear insensibly. The patient then remains sober for two or three months, without a thought of intoxication, and the odor of any liquor is so repugnant to her as to produce nausea, which is a very instructive phenomenon in the case. She can scarcely in the interval drink water just tinged with claret. If allusion be made to her excesses, she denies any fondness for drink. She becomes intoxicated, she says, against her will: "It is not a passion on my part, I drink in spite of myself."

At the time of the menstruation she becomes irritable, easily excited, feels sudden flashes of heat passing to the head and, whenever the desire to drink comes on at this period, the impulse is more pressing and the conflict against it of shorter duration. This is the influence of menstruation on her condition; it shows itself in no other way, nor more in this woman than in any other patient.

It is interesting to note the development of dipsomania in a patient inclined for a long time previously to melancholia; on the other hand, we see accidents due to alcohol coming on after the repeated abuse of drink.

We have not been able to obtain any history of the antecedents of this woman and yet we must, speaking in a general way, look for the cause of the impulse to drink in hereditary predisposition. We will find this proven in the facts that we shall soon examine. Of eight cases of dipsomania that I could present, two are suffering from double convergent hereditary predisposition, five offer a simple heredity. In the remaining case, the data are incomplete.

Foville, in the article already quoted, after having considered dipsomania as a particular form of partial delirium, changes his opinion as to the nosological value and afterwards no longer considers it as a distinct affection, for he says: "Further, in place of considering it (dipsomanie) as a true monomania, as do Esquirol and Marcé, it seems to us more proper to regard it as a symptom of a general affection, which view is upheld by many modern authors, notably Morel, Griesinger, Skae, Forbes-Winslow, Trélat." The facts which we shall observe will not permit any other opinion. Moreover, monomania, in general, introduced into our science by Esquirol to express "a kind of mental aliena-

tion, characterized by a partial lesion of intelligence, of the will or of the affections," is losing support daily as a morbid condition. The elder Fabret raised doubts as to its existence, declaring that this doctrine rested upon erroneous philosophical principles, on a superficial and defective clinical observation, and on a false interpretation of the morbid phenomena.

For my part I reject completely the entire doctrine of monomanias; without denying that the impulse may be the most striking phenomenon in certain forms of insanity, I can only assign it a secondary symptomatic value, the mental condition in which the impulse shows itself being for me the essential feature. We must, however, admit, with the distinguished defenders of monomanias, that the impulse becomes in some cases so imperative and predominant, absorbs and subjugates so completely the mind of the individual, that it impresses upon his insanity a special physiognomy, which seems to justify the belief in monomania. The patients, who will be the object of our special study, will clearly show us that, if the need for drink is the most prominent symptom of the dipsomaniac, it does not in itself constitute the entire affection. It is only a symptom of a mental condition, dependent upon the control of hereditary dispositions.

I will present to you, later, the case of a woman whose history is very interesting, and who first presented herself as a case of melancholia with suicidal tendencies; then, after an attack of hallucination and one of nymphomania, we find her a prey to dipsomania, to which homicidal impulses are soon joined. We can only see in this case, once again, different manifestations of the same pathological condition. In this woman, an attack of dipsomania occurred under our observation, while she was in the house for treatment. No feature was wanting; sadness, discouragement, a sense of powerlessness, of being overcome, insomnia, anorexia, præcordial distress, burning in the throat, and finally the imperative and irresistible need for drink; fortunately for the patient, she was protected against her impulse and unable to satisfy the morbid craving. The attack, from the absence of drink, was shorter and less distressing and was not followed by the profound depression which is the ordinary consequence of abuse of alcohol. This paroxysm without the alcoholic excess is, and should be considered as, a sort of sketch of a short paroxysm of melancholia.

(TO BE CONTINUED.)

POLYPUS OF THE LARYNX IN AN INFANT.—In observing a child presenting symptoms that would call forth the greatest solicitude in an adult, the possibility of a polypoid growth is rarely, if ever, entertained, its occurrence being almost unique. The following fact is instructive in several ways, showing the difficulty of diagnosis in certain dyspnœic

affections of infancy, and the possible existence of a polypus of the vocal cords at that age. An infant brought to the clinic had an intense dyspnœa, with tracheal "sifflement," so pronounced that at first one might think it croup in an advanced stage, which was the diagnosis made by several who were called to see the little sufferer; but as there was no inflammation, and the mother declared the attacks consecutive to pertussis some time before Dr. S., after auscultation, thought it might be a case of adenopathic bronchitis, with the phenomena of compression, explaining the dyspnœa and sifflement. M. Labrie, in whose service it was placed, being enabled to examine it more completely, thought there was a laryngitis, with ulceration of the mucous membrane. The child, having speedily succumbed to diphtheria, contracted in the institution, an autopsy revealed the true condition. On the left vocal cord was a papilloma, on the right side several smaller ones; some nearly pediculated, others sessile. There were broncho pneumonia and pulmonary congestion besides. It is probable that this condition was to be dated back two years, beginning with attacks of suffocation sometime after the pertussis. These cases are so rare that Dr. Simon knows of but one other, reported by Krishaber. This is why a laryngoscopic examination was not made, although it ought never to be omitted when an adenopathic bronchitis could be suspected. This is why a laryngoscopic examination was not made, although it ought never to be omitted when an adenopathic bronchitis could be suspected. This examination is sometimes so difficult as to afford but little light, because imperfectly made. M. Labric cites an instance in which he diagnosticated by auscultation an adenopathic bronchitis; the parents consulted a laryngologist, who pronounced it a polypus of the vocal cords, and greatly aggravated the condition by several cauterizations. M. Labric, consulted again, reaffirmed his diagnosis, and shortly after the patient expectorated an abundance of matter, showing an abscess of a tuberculous nature, evidently of ganglionic origin.—*Clinique de M. Jules Simon.* M. S.

Vaccinations with Intermittent Poison.—By G. Gerhard, *Zeitschrift f. klin. Med.* Quoted from *Deutsche Med. Zeitung.*

The author instituted experiments on two individuals by inoculating them with the blood of patients suffering from intermittent fever, the blood being removed during the attack. The following conditions were observed as preliminaries to the experiments:

1. The place where the experiments were made had to be free from malaria.

2. The persons, from whom the vaccination was made, had to be unaffected by any other inoculable disease, especially syphilis.

3. The individuals to be inoculated had to give their consent to the experiments.

4. The temperature of these individuals had to be taken for a considerable time previous to the experiments, and they must have had absolutely no fever.

The results of the experiments were as follows:

1. The cause of the fever is inoculable with blood removed during the paroxysm.

2. Intermittent fever produced in this way by inoculation is distinguished from the ordinary form by its more irregular course.

3. After a number of single attacks, occurring either singly or in groups, there was developed in one case on the twelfth, in another on the twenty-fifth day a tolerably regular quotidian fever, corresponding to the type of fever in the individual from whom the blood was inoculated.

4. The intensity of the fever was so great in both cases (the temperature rising as high as 106°, and remaining above normal for twenty-four hours), that the experiment had to be terminated by the administration of large doses of quinia.

5. The attacks occurred in both cases at the hour of inoculation, or else reached their climax at this time. The time of incubation could not be easily determined; the first signs of fever occurred in one case on the seventh, in the other on the twelfth day, the more severe attacks of fever began in one case on the seventeenth, in the other on the twenty-fifth day.

This is, we believe, the first time, that experiment on the human subject has demonstrated the direct inoculability of intermittent fever. We are led, almost involuntarily, to think of relapsing fever and its association with the spirilla Obermeirii, and the analogy in clinical history would seem to be borne out by analogy of causation. The observations of Gerhard were made only on two individuals, and it would be hasty to generalize from so insecure a foundation. We await, with considerable interest, further communications on the subject. J.E.

Abstracts and Selections.

I.—OBSTETRIC.

The Combined Method of Turning in Placenta Prævia.—Dr. C. Behm ("*Ztschr. f. Geburtshülfe u. Gynäkologie*," ix, 2) refers to the method which was described by Braxton Hicks in 1861, and to the literature of the subject, in addition to giving a somewhat extended notice of his own experience, involving fifty-three cases with this complication, in the clinic of Professor Gusserow, at Berlin. These cases are divided into two series, the first numbering thirteen, the second forty. Those in the first series were treated by the old method of version; thirty of those in the second by the combined method; the remaining ten required other pro-

cedures. The thirteen mothers gave birth to fourteen children, and the mortality was four for the mothers and ten for the children. As to the insertion of the placenta, in three cases it was marginal, in five lateral, and in five total or central. Of the forty cases in the second series, there were no deaths on the part of the mothers, but eight were the subjects of fever, and one suffered with hemorrhage on the seventh day of the puerperium. Of the forty children, nine were born alive, five of whom were mature, two premature, and two with vital defects. Of the thirty-one dead children, six were mature, eleven were premature, and fourteen had vital defects. Notwithstanding the small percentage of survivals on the part of the children, the author considers the results excellent, and would so consider them even had all the children been lost, when the peculiar conditions attending this complication are borne in mind.

The advantages of the combined method of turning are summed up in the avoidance of sepsis, which it insures, and also the limitation of the loss of blood, by means of the tamponade which is effected by the breech of the child. Turning having been accomplished, the author differs with Spiegelberg, Fritsch, and others in their view that extraction should be as rapid as possible. In twenty-four of his cases in which he noted in interval between turning and extraction it varied between one half-hour and eleven hours, birth taking place in the largest number between two hours and two hours and a half after turning. In the interval the strength of the patient should be re-enforced, and stimulants are regarded with more favor for this purpose than any method of transfusion. As a means of preventing atonic post-partum hæmorrhages, this method of turning has answered perfectly in the author's experience, and no accidents of this nature occurred to him. The aphorism which he proposes for the treatment of placenta prævia cases is *haste, with delay* – haste in performing combined turning, delay in extraction.—*New York Medical Journal.*

Lazarewitch's Straight Forceps with Parallel Blades.—Massalitinoff ("*Ann. de gynec.*," Jan., 1884) states that the main object of this forceps is to avoid the compression of the fœtal head which is inevitable in a *crossed* forceps. It was presented to the late International Congress at London, and afterward, in 1883, it was exhibited at the exposition at Moscow. The excellences of an instrument consist in the absence of the pelvic curve, and in its parallel blades, which are fastened, by means of a pivot and screw, in the handle of one blade, and a hole in the other into which the pivot is mortised. The instrument admits of a maximum separation of the blades at the tips of two centimetres and a half, without altering the parallelism of the handles. It therefore resembles somewhat the old Chamberlin forceps. The advantages claimed for it are the following: 1. On account of their mobility, the blades can be perfectly adapted to the head as well as to the walls of the pelvis. 2. With par-

allel blades the compression of the head is produced only by the walls of the pelvis. 3. In cases in which the head is in the superior strait, even in an oblique diameter, a straight forceps can be successfully used on account of the absence of the pelvic curve. 4. With this instrument the progressive movements of the head are produced with much greater facility than with one which has the pelvic curve. 5. This instrument is especially useful for those who have not had much experience in the use of the forceps. 6. With this instrument it is easier to change the position of the head, and bring it into another diameter of the pelvis, than with others. 7. The blades can be joined together with great ease on account of the mobility of their articulation.—*N. Y. Med. Jour.*

Excessive Vomiting of Pregnancy.—In a recent paper on this subject Dr. Sutugin draws the following conclusions:

1. Excessive vomiting is one of the uncommon affections of pregnant women.

2. The affection appears after the second, and up to the last months of pregnancy; but it is much more frequent during the first half of the period of pregnancy.

3. The affection is more frequent amongst the richer classes. Race has no influence in its production.

4. It is more frequent in multiparæ.

5. The symptoms of the affection are very analogous to those of inanition, which explains the decreased urinary secretion, and the presence of albumen and cylinders in the urine.

6. In order to solve the question of the frequency of the appearance of albumen and casts in the second period, further observations are necessary.

7. Death takes place either by exhaustion or by intercurrent puerperal disease, or from complicating diseases which have no direct relation with pregnancy.

8. The nature of the affection is still unknown.

9. The treatment should correspond to the different periods of the affection. If therapeutic means fail in the second period, premature delivery should be resorted to.—*Medical News.*

Delivery Prevented by an Enlarged Fetal Spleen.—Surgeon-General Chas. R. Francis, of the British Army, reports in the *Med. Press and Circular* a very singular case which occurred in the practice of Dr. Webber, of Dinagepore, India: A well-formed native female, aged twenty, was taken in labor with her first child, and attended by a native midwife. The labor had continued for several hours, when the civil surgeon was called, his services being desired owing to the cessation of all pains after the delivery of the head. The child was dead, but he corrected the position

with facility, bringing the shoulders down and hooked down the arms with his fingers. In this position traction was practiced for two hours without any advance. At this time the head became detached. The woman was then placed under chloroform and podalic version performed, but still without effecting delivery. It was decided to open up the child's abdomen, the distension of which was an obstacle to delivery. A guarded scalpel was introduced, and, after the opening was made, an enormous and hard tumor was detected, which required to be broken up before it could be removed. The delivery was then easily accomplished, and it was then discovered that the tumor was an enormously enlarged spleen. The placenta came away in eight hours without flooding, and the woman made a complete though slow recovery.—*Maryland Medical Journal.*

Bromide of Ethyl in Obstetrics.—Mueller, of Berne (German Gynecological Society): Following in the wake of experiments repeatedly made of late (especially by Heckermann, of Berlin, fifty cases), the author has employed ethyl bromide in twenty-two cases of labor. The results are not as favorable as those obtained by Heckermann. The action is uncertain. He employed it thirteen times in the second stage. In five of these cases the labor-pains ceased altogether; in three, they ceased in part; in five, no effect was produced. The drug was used eight times during the whole course of labor; in two the effect was very good; in four the effect was temporary; in two the pains were obtunded only in the first stage. On the average, fifty to sixty grams of the drug were employed. During the narcosis the pupils dilated and the face became congested. Little effect was produced on the pulse and respiration. He believes that the retardation in the activity of the contractions is merely apparent. He has witnessed no post-partum hemorrhages and no mal-involution of the uterus.

Quite noteworthy is the fact that a very severe bronchitis set in during the puerperal state in two of the cases. The purity of the drug was established by chemical examination. Perhaps the quantity employed (eighty grams) was too long.—*American Journ. of Obstetrics.*

A Long Cord.—At a recent confinement we found, at the delivery of the child, that the cord was wound around the neck five times. After its release, on measurement, we found it to be forty-nine inches long. Rather a phenomenal length in our experience.—*N. E. Medical Monthly.*

Dr. J. F. Goldman, Huntsville, Ala., says: "Was called to see a little girl, eight years old, on January 18th, who was troubled with a vaginal discharge of buff color, and almost creamy consistency. She complained of pains in her back, hips, and lower abdomen, very much as women do who suffer from leucorrhœa. Having had a case of gonorrhœa recently in a girl of similar age, I suspected something of the kind here, but examination proved the suspicion wrong. Further examination and inquiry convinced me that she was of a scrofulous diathesis, with possible syphilitic origin. Knowing of no alterative so effective in scrofula as Battle & Co's Iodia, I ordered half-drachm doses three times per day. In a few days the discharge ceased, and all symptoms passed away."

II.—GYNECIC.

On a New Mode for Operating for Fistula in Ano.—By Edward W. Jenks, M.D., LL.D., Chicago, Ill.

Although diseases of the rectum and anus do not belong exclusively to the domain of gynecology, they are of such common occurrence among women, and are so frequently encountered by the gynecologist, either associated with other pelvic disorders of women or as the only diseases of that region, that the writer offers no apology for presenting to the Society a brief paper with the foregoing title.

It may not be the part of wisdom to entitle any mode of operating or plan of treatment as new, in view of the fact that the history of medicine shows that much which we term new was known hundreds of years ago. I have, however, ventured to designate as new the operation described in this paper, for the reason that I find nothing analogous to it described in modern works.

In all literature on the subject of fistula in ano, including the latest systematic treatises on rectal and anal diseases, may be found frequent allusions to incontinence of feces and flatus following, and consequent upon, surgical operations in the anal region. As this is dependent on the condition of the sphincter muscles, it differs greatly in degree, from slight weakening to total loss of contractile power—*i.e.*, partial or complete incontinence. It is not uncommon for partial incontinence to succeed an operation for fistula in ano when done by skilled hands and after the most approved method of the present time. Allingham says: "In operating upon women suffering from fistulæ, cut as little as possible, for anything like too free incisions are apt to end in incontinence of feces, or, at all events, in such partial loss of power in the sphincter as to prevent the patient retaining flatus, a result which, I need scarcely say, is a most disagreeable one." "A patient who suffers from inability to retain flatus or feces is in a most unpleasant condition; in fact, some sensitive persons would not undergo any operation which was at all likely to induce such a state, and would prefer any physical suffering rather than the perpetual fear of being in any way offensive to others." A surgeon of distinction, who has given special attention to diseases of the rectum, recently informed the writer that among the many anal fistulæ he has incised "the number is few in which the function of the sphincters is as perfectly performed as it was previous to operating." I understood by his remark that, while there was not what he designated as actual incontinence in any degree in the majority of his cases, there was less control of liquid feces and flatus than existed before the sphincters were incised.

A little over a year ago I was consulted by a woman on account of rectal incontinence. This condition was caused by an operation for a fistula which scarcely involved a single fiber of the upper sphincter. The

operator in this case was not an experienced or distinguished surgeon, this being his first operation about the rectum. The causes of incontinence, in my opinion, were: (*a*) a perineum previously weakened by being torn in childbirth, and (*b*) the cutting of the lower sphincter obliquely.(1)

Two cases have quite recently been brought to my notice of complete incontinence succeeding operations for fistulæ. Both of these women were operated upon by gentlemen of experience and acknowledged skill. In each the internal sphincters were cut, but not entirely through. One of these women, since her operation for the fistula, has been subjected to two additional operations for the incontinence, without deriving any benefit therefrom.

A suit against a surgeon for malpractice, which is now pending in one of the courts of a Western city, involves the subject under consideration, and is of sufficient interest to deserve more than a mere allusion. One trial, resulting in a disagreement of the jury, has been held, and another, which has been ordered, will soon occur. In this instance suit is brought by a woman against a surgeon of prominence, in which she claims damages to the amount of several thousand dollars on account of the unskillful and improper performance of an operation for fistula in ano upon her own person by the defendant in the case. She states that, although she suffered inconvenience and discomfort prior to the operation for the fistula, she is now, by reason of fecal incontinence, in a much worse condition. She has made the suit appear still stronger in her favor, as I have been informed, by testifying that she has undergone an additional surgical operation for the purpose of curing the incontinence, but has derived no benefit therefrom.

From all I can learn relating to the treatment of this patient, the surgical operation was performed as it is generally done by surgeons, and after the manner advised by the majority of modern authorities. My friend and former pupil, Prof. H. O. Walker, of Detroit, was an expert witness in this suit, and, while in conversation with him concerning it, and of the various modes of treating different forms of anal fistulæ, it occurred to me that some cases might be successfully operated on by a method similar to the operation for a torn perineum. By so operating, it seemed, both to Dr. Walker and myself, that immediate union would be secured, a tedious convalescence avoided, and the incontinence rendered impossible.

I have not had the opportunity of performing the operation which I have designated as a new one for fistula as many times as I would like

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1 My own observation has convinced me that Allingham has not overestimated the importance of incising the sphincters at right angles to their muscular fibres and that even an oblique incision of the lower sphincter may result in complete incontinence.

before bringing it to the notice of the Society, but my limited experience has led me to fully believe that it is an improvement upon the method of incising and expecting the gap to be healed by granulation, and also that it is of sufficient importance to merit a trial at the hands of other surgeons. I have had but two patients upon whom I have tried this operation, and with each the success was all that could be desired.

The mode of operating as I have performed it may be briefly described as follows: First, after determining the routes of the fistulous tracts, they are incised after the usual method, aiming, in every instance where the incision involves either sphincter muscle, to have the incision at right angles to the muscular fibers. The next step is to carefully dissect out the so-called pyogenic membrane, or all of the lardaceous tissue and the cartilaginous substance along the route of the fistulæ. This can be done with curved scissors or a cutting curette. It is not unusual to find several bleeding vessels in the fistulous tract; these should be secured by torsion in preference to ligatures, but if ligatures become a necessity, then Chinese silk is to be preferred. The surgeon frequently finds, after cutting a fistula, that there are, overlapping the incision, portions of thin livid skin of low vitality. This should be entirely cut away in all instances, but in the operation under consideration the edges of the incised skin should be pared until they can be brought together perfectly, and then, by deep sutures, the incised parts maintained in perfect apposition until adhesion is effected. The deep sutures can be adjusted in the easiest manner by a Peaslee's needle or the common perineal needle, and should be buried beneath the bottom of incised fistulous tract, so that no portion is visible excepting the two ends protruding from the integument. In addition to deep sutures, it is in most instances necessary to insert superficial sutures alternately with the deep ones, that the strain upon the latter may be lessened and the edges kept in apposition. The severed portions of the sphincters are united by sutures in the same manner as is done in complete laceration of the perineum, for the knowledge of which we are indebted to our distinguished Fellow, Dr. Emmet. If an operation for anal fistula by the method advocated here proves a success, it is mainly owing to the severed ends of the sphincters having been held in perfect apposition a sufficient length of time to effect their union. For this purpose silver-wire sutures, properly adjusted, are, without question, preferable to silk. I have used both silk and silver with equally good results, but prefer the latter, deeming it the most reliable if the operator has been accustomed to its use in surgical work.

If an opening into the rectum of the tract of the fistula is of such a height that its incision includes any portion of the internal sphincter, it is necessary to use additional sutures within the rectum to bring and maintain in apposition such incised parts as the external sutures will fail to do.

I have used for this purpose Chinese silk, for the reason that, while

sutures of this material are commonly of sufficient strength to hold the parts together until union is secured, they do not require removal by the surgeon, as they are commonly discharged in a few days. If it is deemed desirable for any reason to use stronger sutures, the best material is "ironized silk" (1) (1 to 3), because of its black color, which renders it much easier than white silk to remove from the rectum. In case of there being several fistulous openings in the rectum, an attempt to cure all of them at one operation by this new method would probably result in failure. The same is true of the ordinary mode of operation, as is well known by all who have had much experience in rectal surgery. With several incisions left to heal by granulation when the sphincters are included, incontinence is sure to follow. We are advised by those who are entitled to speak authoritatively on the subject, that for this reason an attempt should not be made to cure all by a single operation. In the mode of operation which is advocated in this paper, more sinuses can be safely cut than by the old method, and yet too much should not be attempted in one operation. Very much depends on the character of the fistulæ, as, for instance, if there is anything like the ulceration common with consumptives at the rectal end of a sinus, an attempt should not be made to bring the rectal edges together by sutures; yet some of the other sinuses can be incised and made to unite by sutures; nor should any fistula be incised if it is acutely inflamed. In either one of these conditions pus would be likely to burrow and new sinuses be formed. Allingham gives this as a reason why we "should never operate on a fistula that is from any cause acutely inflamed."

The route of an internal fistula may be straight or tortuous, and, if either, sometimes it will run close to the mucous membrane, and have its rectal opening above the internal sphincter, or it may run behind both sphincters, and have its opening above the internal, or, while extending a distance above the internal sphincter, as a probe indicates, its rectal opening may be quite a distance below its upper limit. If such fistulæ are incised their entire length, and then left to heal by granulation, incontinence in some degree is inevitable. If some of these fistulæ are not too deep, or do not communicate with abscesses, they may be cured by the method heretofore described. In the absence of exact knowledge concerning the use of sutures, in case all the fibers of both sphincters have been cut through, I deem it the best and most prudent course to pursue, when such incisions seem to be required, to insert an elastic ligature at the upper limit of the fistulous tract, and after causing it to cut through the internal sphincter at right angles to its muscular fibers, the remaining portion may be incised and united by sutures, in the manner

1. I am indebted to Professor William H. Pancoast, of Philadelphia, for suggesting the use of ironized silk in the operation, and its advantage in this and other operations pertaining to gynecological surgery.

already described, or left to be cut entirely through by the elastic ligature, as in the judgment of the surgeon may seem best in each case.

It is impossible to follow any exact rules, so it is needless to give them for the surgical treatment of fistulæ; especially is this true of many internal fistulæ. While, in my opinion, there are some fistulæ in which sutures are better than any other mode of treatment, others can be more certainly cured by means of the elastic ligature; then, again, there are some which can only be treated by being incised and left to heal by granulation.

As regards the matter of adjusting sutures, the same exact rules cannot be followed as in perineorrhaphy, or other plastic operations about the pelvic organs, for the reason that there is such a lack of uniformity in the shape and location of fistulæ. For the purpose of obtaining success in the operation under consideration, adherence to the general rules of surgery, the teachings of experience, and the ingenuity of the operator are requisite in each individual case.

Having described the mode of operating in anal fistulæ, and endeavored to show its advantages, I will further illustrate this method by an account of cases operated on.

The first patient was an inmate of my private hospital, Mrs. A., aged twenty-five, nulliparous, of a strumous diathesis. The fistulæ had troubled her four years. She had two distinct fistulæ, opening into the rectum half an inch apart. One fistulous tract was straight, having its external opening in the direction of the tuber ischii, opening on the left side about two inches from the anus, while the internal was immediately below the internal sphincter. The other fistula had its tract above the first, and its external opening in the fleshy part of the left buttock, three inches and a half from the anus. There was, in addition, a lateral sinus, in the form of a blind fistula, leading from this one, and situated about midway between the rectal and external orifice, and directed upward. The first sinus was incised, packed with marine lint, and allowed to heal by granulation. The second one, with its lateral branch, was treated after the method advocated in this paper.

As this was an experimental operation, I was slow in carrying out the details. The tract of the fistula was carefully cleared of all adventious tissue by means of small, curved scissors, the edges and deeper parts trimmed, and bleeding vessels secured by torsion, as has been previously described; then sutures were inserted so that no part was visible in the wound. This was done with great care beneath the tract of the main sinus and its lateral branch. The severed sphincer was brought together by sutures in a manner similar to Emmet's operation for complete laceration of the perineum. It could then be seen that within the rectum there was a gap that needed to be closed, or else the fistula would remain

unhealed. Four interrupted sutures of Chinese silk were used within the rectum for this purpose.

Nine days later, after a thorough evacuation of the bowels, all sutures except those of Chinese silk were removed; union was complete the entire length of each sinus. The other sinus, which had been simply incised and packed with marine lint, required a continuation of similar treatment for over a month before the gap had healed by granulation. This one might have been cured in the same time as the others if it had been treated in the same manner, as it was a more favorable case for the use of sutures than the others; but instead of being healed in ten days, as the others were, it kept the patient confined to her room for weeks, requiring daily dressings, and causing discomfort that might have been avoided.

The second case was in private practice, the subject being Mrs. B., aged thirty-two, a widow. She had borne two children, and her perineum was torn to the external sphincter. The fistula had existed for six years, and was attributed by her to a difficult instrumental labor, from which she was seriously ill several weeks. The external opening of the fistula was on the left side, two inches and a half from the anus; the route of the fistulous tract was quite straight, through one edge of the perineum to its rectal extremity in the recto-vaginal septum, at the lower margin of the internal sphincter. The appearance of the fistula after being incised was similar to that of a large sized artery. The dense cartilaginous substance that caused this appearance was carefully dissected out by means of small, sharp-pointed scissors.

There were no pockets for the retention of pus, no lateral or crooked sinuses leading into it; but, after being cut, and all the livid skin was trimmed away from the edges, its appearance was similar to a recent incision, which would heal readily if it was properly brought together, and so maintained for a sufficient length of time. This was done by means of sutures inserted in the same manner as in the first case. Within the rectum three interrupted sutures of Chinese silk were introduced. Convalescence was rapid; the bowels were moved by means of laxatives and an enema on the ninth day. On the tenth day all external sutures were removed, two of the rectal sutures had disappeared, and no attention was paid to the remaining one. Union of all portions of the late fistula seemed to be perfect, and a cure was effected.

In concluding this paper, there are a few points to which I desire to direct attention:

1. In my own opinion, while this mode of operating is not adapted to *every* form and variety of anal fistulæ, I believe it is by far the best method in the majority of cases.

2. The long and tedious convalescence inseparably connected with the ordinary mode of operating is by this mode avoided.

3. Other advantages of this mode of operating are (*a*) securing union by the first intention, and (*b*) the prevention of incontinence.

4. In cases where the external sphincter has become rigid, it is not easy to hold its incised ends in close apposition without forcibly dilating it with the thumbs prior to operating, or else by an incision opposite the tract of the fistula, of sufficient depth to temporarily paralyze the muscle. In this way the sutures in the sphincter will render better service.

5. For the purpose of facilitating the introduction of sutures within the rectum, there are two means, as follows: (*a*) the introduction into the rectum of a Sims speculum; (*b*) the eversion of the lower portion of the rectum by means of one or more fingers being introduced into the vagina, and then turning out a portion of the rectum through the external sphincter.

Dysmenorrhea; Its Treatment by Dilatation.—Abstract from a paper by W. W. Potter, M.D., read before the New York State Medical Society:

1. That, in dysmenorrhea, pain bears no special relation to the calibre of the cervical canal. In other words, though the channel of exit may possess sufficient patency to convey the menstrual fluid outwards with freedom, it is not a contraindication for the use of the dilator.

2. That the ready passage of the uterine probe or sound is not sufficient proof that the uterine orifices are free enough to contraindicate the necessity of dilatation. Cervices of large calibre often demand dilatation for the relief of dysmenorrhea.

3. That anteflexion and stenosis, though frequently coexisting with dysmenorrhea, are by no means always in the relation of cause and effect to the malady, but are, quite as frequently, mere coincidences of it. Many women have one or the other condition, and yet do not suffer with painful menstruation.

4. That the complications of dysmenorrhea known as hystero-neuroses —the reflexes of the disease itself—frequently obscure the real malady to such an extent as to mislead in both diagnosis and treatment; but these are the cases, belonging as they do to the neurotic variety of the disease, which generally derive great benefit from dilatation.

5. That in the neurotic form of the affection the structures about the internal os will, speaking generally, be found very sensitive, considerably thickened, especially along the anterior wall of the cervix; near the os uteri internum, dense and hard, resisting the dilator with considerable obstinacy. This hyperæsthetic structure appears to be the real seat of the neurosis.

6. That in the neurotic form of dysmenorrhœa the indication of treatment is to stretch out this hypertrophic and hyperæsthetic tissue, with a view to obtain its resolution and absorption. When this is accomplished, the structures near the orifice of exit, *i.e.*, both above and below the so-

called internal os, do not as readily take umbrage at the phenomena of menstruation, and thus the patient happily escapes the pain which has heretofore been associated with the performance of this function.

7. That for this form of the malady moderate consecutive dilatation, with graduated vulcanite or metallic bougies, possesses advantages over the more radical method with the two-bladed expanding dilator, which completes its work at a single sitting; for, whereas the latter instrument stretches the parts laterally, thereby increasing the transverse diameter of the channel of exit only, the former not only dilates the entire lumen of the passage, but, what is of even greater importance, by steady and repeated pressure, it promotes absorption of the hardened and thickened tissues wherein resides the neurosis.

8. That to secure success of the measure it is important that firm fixation of the uterus should be obtained, either by double tenaculum or volsellum, and to this end the Sim's speculum and the semi-prone position are indispensable. The single tenaculum will often tear out, and, beides does not hold the cervix with sufficient firmness. In many cases an anæsthetic will be required, but, when possible, it should be omitted as unnecessarily complicating the procedure.

9. That it is of less consequence to make the dilatation extreme than to do it well. A moderate amount of stretching, properly done at regular intervals, seems to secure better ultimate results than a more radical single dilatation of the passage.

10. The theory is offered that the dilators relieve the suffering from the agonizing pain of the malady much on the same principle that nerve-stretching relieves ordinary neuralgia.

11. Finally, let it be remembered that the foregoing remarks are intended to apply, particularly, to a class of cases which may be designated as neurotic, or belonging to the neurotic form of dysmenorrhœa, in which the channel of exit, though apparently large enough to carry off the menstrual flux, nevertheless possesses little of resiliency, and in which, furthermore, at the point where the uterine cavity merges into the cervical canal the tissues are thickened, metamorphosed, and hyperæsthetic.—*Medical News.*

Treatment of Hysteria.—In accordance with the view that hysteria is a psychial disease, Liebermeister (*Volkmann's Sammlung*), makes the following observations concerning its treatment, which we extract from a translation by A. F. C., in the American Journal of Obstetrics: The treatment must be, to a great extent, psychical, but this does not imply a disregard of other means, especially when there is evident disease of any of the organs or parts. The etymology of the word hysteria (ὑστέρα, the uterus) of course, implies disease of a particular organ, but it is often the case that no disease of the uterus can be made out. On the other hand,

hysteria may be cured, and yet disease of the uterus or the other genital organs remain. Castration, and removal of the clitoris, are quite disapproved of by the author, when they are to be performed in order to cure hysteria; and rather faint praise is given to other gynecological treatment for this purpose. As the general condition of the patient improves, the hysteria is likely to improve also. Change of residence, certain water-cures, bath, exercise, etc., are recommended, and directions are given which are suited to particular types of the disease. Among psychial instrumentalities, the author recommends the provocation of joy and hope. Hypnotism, which is advocated by some, is calculated, in the author's opinion, rather to excite than to cure hysteria. Inherited tendency and education are always to be regarded in a consideration of the prophylaxis of the disease, and if self-control and a sense of responsibility in regard to duties to be performed can be inculcated, the result will be a satisfactory one. The more striking phenomena will call for special treatment. If the attacks take the form of spasms, ecstacy, or somnambulism, consciousness will be only partially abolished, and in this fact will lie the differentiation from actual disease, though hysteria and the disease which it simulates may co-exist. For the treatment of such attacks, cold water poured over the surface of the body is recommended. The induction current is also a useful instrumentality. Aborting a first attack may also result in cutting short the disease, or, at least, in delaying it. Metallotheraphy has been tried by the author in the treatment of hysterical anesthesia, but its effect, if any, is thought to be only upon the imagination. One of the main elements in successful treatment consists in gaining the entire confidence of the patient, and another in causing her to abandon the habit of brooding over herself and her condition. Medication is usually superfluous.—*Louisville Medical News.*

Hydrastis Canadensis in Uterine Diseases. — Professor Schatz, of Rostock, who, if we are not mistaken, has removed the whole uterus at least ten times, reminds one-sided knife gynecologists in the *Deutsche Med. Zeitung*, that in addition to an operative treatment of uterine diseases, there is also a method of treatment by medicine, and that, if this be followed out, sufficiently good results will be obtained, to lessen the frequency of dangerous and maiming operations. There are especially functional disturbances of the uterus and ovaries, anomalies of menstruation, direct or reflex, or simply congestive disturbances, which exclude operation and call for medication. That happiness is not alone to be acheived by the aid of the knife, the hydrastis canadensis has given to the writer a striking proof. This drug, which has only been employed by the writer in the form of the fluid extract, contracts bloodvessels, and thus diminishes congestion of the genital organs. In long continued, or large doses, it diminishes the frequency of menstruation; the flow is also dimin-

ished and the pain is lessened and often removed entirely in vaginal hemorrhage and dysmenorrhœa that has no local cause, as well as in diseases of the uterus and its neighborhood. Its effects are noteworthy in many myomata, the hemorrhage occasioned by them being much lessened, and sometimes entirely prevented. He generally gives twenty drops of the fluid extract four times daily, not only while hemorrhage is actually present, but in preference a week before the anticipated painful or profuse menstruation. This drug occasionally, after lengthened employment, improves the appetite.—*Medical Press.*

III.—DISEASES OF CHILDREN.

Ovariotomy in Infancy.—Dr. Roemer, Assistant-Surgeon to the Augusta Hospital, Berlin, has recently published, in the *Deutsche Medicinisch Wochenschrift*, a case of ovariotomy performed by him on a child aged one year and eight months. At the birth of the child, the midwife observed that its abdomen was much distended. There was little difficulty in diagnosis, and the pelvis was readily explored though the rectum. The tumor was removed last August, under corrosive sublimate spray; it was "of the size of a child's head," and there was slight adhesion of the omentum. The pedicle was long and thin, and was secured by a double catgut ligature. The right ovary was the seat of disease, the left was perfectly healthy. The tumor was dermoid, containing hair, bone, and cartilage. After the operation, the child was tied gently but effectually on to its cot, and opiates were given when required. It was fed on cold milk and wine. The highest temperature was 101.6°; this point was reached on the evening of the second day. On the fifth, the child's bowels were freely opened by five minims of castor-oil administered twice; on the twelfth, the abdominal sutures were removed. The child recovered perfectly. Dr. Roemer gives the following statistics of ovariotomy performed on children. One of the youngest cases next to his own was under the care of Dr. Neville of Dublin: the patient was two years and eleven months old, but only survived the operation for two hours. Busch operated on an infant aged two, Alcott on a child aged three; both cases died. Schwartz operated successfully on a child aged four; Barker on two, and Knowsley Thornton on one aged seven; and Spencer Wells, Cupples, and Chenoweth, each on one child eight years of age.—*British Med. Journal.*

The Prevention of Blindness in Children.—The following excellent popular directions for the prevention of the frequent form of blindness arising from the destructive purulent ophthalmia of newly-born infants, is being published and diffused by the Society for the Prevention of Blindness (England):

"One of the most frequent causes of blindness is the inflammation of

the eyes of new-born babies, a disease which can be prevented and always cured. In almost all blind schools in England and on the Continent, a third, and even more, of the children's blindness is caused by the neglect and unsuitable treatment of this disease. In the Wilberforce School for the Blind at York, it is said that out of eighty-nine pupils thirty-seven are blind from this cause; and several eminent oculists state that half the blindness in Europe is due to this inflammation of the eyes of new-born babies. This frequent blindness is largely owing to the general ignorance of mothers, and to the unpardonable neglect of the midwives, nurses, and others who have charge of the infants in their earliest days. In many cases these persons prevent resort to skilled medical assistance, in order to try some unsuitable domestic remedies, until it is too late, even by the most skillful treatment, to save the child's sight. Although the disease appears sometimes in a very mild form, it may still, without some suitable treatment, have an unfortunate issue; but in most cases the disease takes a more determined character, and then, if left to itself, it may develop with such rapidity that, in the course of a day or two, all hope for preventing blindness is lost. In general, newly-born babies seldom suffer from any other eye disease, and its first appearance is easily recognized by the redness, swelling, and heat of the eyelids, and by the discharge of a yellowish-white matter from the eyes. This dangerous and ruinous disease is always curable if treated at once. Immediately, on the first appearance of these symptoms, send for a medical man; and, until his arrival, proceed at once to keep the eyes as clean as possible by very frequently cleansing away the watery discharge. It is the discharge which does the mischief. The cleansing is best done in the following manner:

"1. Separate the eyelids with the finger and thumb, and wash out the matter by allowing a gentle stream of tepid or warm water to run between them from a piece of rag or cotton wool held two or three inches above the eyes.

"2. Then gently move the eyelids up and down in a circular way, to bring out the matter collected under them; wipe it, or wash it off in the same manner. This cleansing will take three or four minutes, and is to be repeated regularly, once every half hour at first, and later, if there is less discharge, every hour.

"3. It must be borne in mind that sight or blindness depends entirely in these cases on the greatest care and attention to cleanliness. Small pieces of rag or cotton wool are better than a sponge, as each rag is to be used only once, and should be burnt immediately; sponges should never be used except they are thrown away or burnt after each washing.

"4. A little washed lard should be smeared along the edges of the eyelids occasionally, to prevent them from sticking.

"5. The eyes should not be covered up by any bandage or handkerchief, as the discharge is thereby prevented from escaping.

"6. Fresh air and an equal temperature in the sick-room are absolutely required, and the eye, while suffering from the disease, should be kept carefully from all strong lights. Many cases of this disease might be entirely prevented by cleanliness of the eyes. (*a*) Immediately after the birth of the baby, and before anything else is done, the eyelids and all parts surrounding the eyes are to be wiped with a soft, dry, linen rag; afterward, these parts must be washed with tepid water before any other part is touched. (*b*) Avoid exposing the baby to cold air; do not take it in the open air when cold; at any rate, dress the infant warmly and cover its head, because cold is also one of the causes of this eye disease."—*British Medical Journal.*

Bibliography.

The International Encyclopedia of Surgery: A Systematic treatise on the theory and practice of surgery by authors of various nations. Edited by JOHN ASHHURST, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with chromolithographs and wood-cuts. In six volumes. vol. IV. New York: Wm. Wood & Co.

Another volume of this really excellent work has appeared, and we venture to say that the satisfaction it will bring to the Profession will be second to that of none of the former ones. The articles contained in this fourth volume are seven in number, viz: Injuries of bones, by John H. Packard, M.D.; Diseases of the joints, by Richard Barwell, F.R.C.S.; Excisions and Resections, by John Ashhurst, Jr., M.D., excisions of the knee, joint by Geo. E. Penwick, M. D., C. M: Tumors, by Henry Trentham Butlin, F.R.C.S.; Injuries of the back, including those of the spinal column, spinal membranes, and spinal cord, by John A. Lidell, A.M., M.D.; and Malformations and diseases of the spine, by Frederick Treves, F.R.C.S. The article on diseases of the bones, by Prof. Ollier of Lyons, has been unavoidably omitted, but will be found in a later volume. The treatise on Injuries of the back, though complete in itself, is supposed to have lost some supplementary matter of great value on account of the death of its author which took place as the last proof-sheets were being revised. The article however, elaborate as it is, stands as the work of Dr. Lidell, without the interference of others.

The article on injuries of bones has the place of honor in the book, and it deserves it well. It does not appear, however, that subjects are discussed out of the regular routine, but even were it otherwise the above article could not fail to be a fitting introduction to such a volume. The troublesome nature of fractures and the frequency with which they give rise to dissatisfactions among patients and their friends, along with the well known fact that they are often followed by suits for malpractice,

makes the subject a peculiarly important one to surgeons; and the author seems to have appreciated this fact, judging from the care with which he has handled it, and the fullness and minuteness of detail which characterize the work. While it is impossible to call attention to every part of so large a work, or, in fact, to every part of so extensive an article, still there are some things of new and special interest, which may be referred to. Among the predisposing causes of fracture are mentioned the trophic disorders of the nervous system, Rickets, and (unaccountable) brittleness. The possible identity of rickets in the child and ostes-malacia in the adult is discussed, with this qualifying distinction that in the subacute inflammation of rickets there is little or no pain while in the mollites ossium of adults, characterized by fatty degeneration, pain is excessive. The subject of trophic disorder of bones is far from being understood though the author seems perfectly justifiable in accounting for the frequent fractures in tabetic patients in this manner. Granting the fact that in locomotor ataxia patients are much more clumsy, more liable to fall in walking, and less able to avoid other accidents, still it is beyond doubt that their bones are much softer and give way under really trifling forces. Fracture of the forearm from lifting a plate, repeated fracture of the ribs apparently from no other cause than the muscular action required in breathing, and inability to turn in bed without causing fracture of some bone or other, are extreme examples of this very peculiar condition, while all degrees of susceptibility to fracture are represented in the disease. While this condition generally affects the whole system, local softening of bone has been observed, and aptly explained by the author to be possibly due to some localized central degeneration.

The pathological changes consist in fatty softening of the inner structure and enlarged medullary and Haversian canals with thin outer lamellæ.

The peculiarity of bony brittleness not dependent on the above diseases may be attributed to age or heredity, as whole families are sometimes subject to it. According to Gurlt boys are subject to fracture from one to four years one and a half times as often as girls. From five to eight years 2⅓ times as often; between twenty-one and thirty, ten times as often; and between thirty-one and forty, eleven and a half times as often. Between seventy-one and eighty women suffer two and a half as often as men, and from eighty-one to ninety, seven times as often. The figures of Malgaigne are somewhat different.

The remarks on fat-embolism show that according to Flournoy, three conditions are necessary to its production; large openings into the veins, free fluid fat, and a vis a tergo, generally found in a copious extravasation of blood. According to Scriba, fat-embolism comes on as a secondary shock within two or three days after the fracture and therefore earlier than venous thrombosis. It is marked by dyspnea with irregular action

of the heart, slight hemoptysis, shallow respiration interrupted by deep sighing inspirations, and subsequently by Cheyne-Stokes respiration, bilateral spasms or paralyses, and diminution of reflex irritability. The chest is free from dullness or rales, and fat is occasionally found in the urine. The temperature is variable. As to treatment of this condition the intra-venous injection of ether is suggested. The article on injuries of bones occupies 260 pages.

The second article is the very complete one on diseases of the joints by Richard Barwell, F.R.C.S. So extensive and elaborate is this essay that at first glance too much would seem to have been said; but if care is taken to read the matter over it will be found that all is good and that this somewhat prosy subject has been handled with ability. The different forms of synovitis are first discussed; simple, dry, and suppurative synovitis, synovitis from absortion of morbid matters, strumous synovitis, rheumatic synovitis, gouty synovitis. The etiology of dry synovitis is obscure; it generally affects the knee only. Its course is marked by great pain, little enlargement, no redness, and rapid wasting of the muscles. It is quite liable to be followed by anchylosis.

Under the head of synovitis from absorption are mentioned urethral synovitis, ante partum and post partum joint affections of pregnancy, synovitis connected with suppression of the menses, synovitis arising from so called blood poisoning, and also during or after enteric fever, smallpox, Scarlatina, diphtheria, measles, mumps, and dysentery.

In the discussion of rheumatic synovitis the author discards all theories as to the nature of rheumatism and laments the fact that so much care has been bestowed upon the subject without finding out its nature.

The chapter on movable bodies in the joints is quite interesting. In eighty-five per cent. of the cases they occur in the knee, the next common location being the elbow, and rarer still, the hip and ankle. When few in number they may attain a considerable size, but if exceedingly minute (smaller than a mustard seed) they may exist in great numbers. They may be oval, conglobate or pyriform in shape; and may be cartilaginous, bony, osseo-cartilaginous, fibrinous, or lipomatous in composition. They are formed from hypertrophied fringes of the synovial membrane which may receive deposits of cartilage cells and grow, while the pedicle is lengthened out and attenuated. Considerable motion is allowed these bodies with such a pedicle, but after a while this gives way under the joint motions and leaves them perfectly free. Another mode of formation is in some kind of inflammatory thickening or deposit of blood clot in the peri-synovial tissue, which forms a nucleus for further growth and this takes place as above.

Still mother mode is by the appearance of osteophytes at the line where the synovial membrane is attached to the bone. These grow and become detached in the same manner. Enchondrosis, or direct cartilaginous

growth, is possible but very rare. Portions of normal cartilages may be severed from their attachments and float around loosely in the joint. The chief symptom of this difficulty is the sudden and sickening pain which happens whenever a body of any size becomes engaged between the joint surfaces. The treatment is palliative and curative, the first mentioned being to so manage the bodies that they may not be caught between the articular surfaces, and the second, to get rid of the offending body altogether.

This is effected in two ways: indirect and direct. In the first method a subcutaneous cavity is made near the joint into which the body is squeezed. The wound in the synovial membrane is then allowed to heal, after which the body is cut down upon and removed. The direct method is to manipulate the body into an accessible part of the joint and then slide the skin over it as far as possible, cutting down on it in the direction it would be apt to take when the pressure is removed. The latter method seems to have given more satisfactory results.

The chapter on articular osteitis affords matter for twenty-three pages, while arthritis deformans is discussed in seven, and syphilitic affections of the joints in four.

Hip joint disease comes in for a big share of attention and is largely illustrated with wood cuts.

When true anchylosis of the knee occurs at an angle greater than 145° it should be let alone. If less than that the author's method is to divide the femur, and if less than a right angle, to divide the tibia also.

The author describes his method of operating very minutely and graphically, giving reasons for the detail resorted to, which we consider highly justifiable.

The subject of neuroses of joints and arthropathies from diseases of nerves and nervous centres is very interesting and accompained by some curious illustrations.

Lastly, tumors of joints with aneurism and echinococcus of bone conclude this valuable and interesting work.

The article on excisions and resections by John Ashhurst, Jr., M.D., comes next in order. About an author who has succeeded so admirably in arranging the matter of others little need be said. It may be taken for granted that nothing has been left incomplete. As to points of interest in this article the reader is especially referred to the remarks on "process of repair after excision" on page 449. Here may be found some hints of great value to the surgeon especially when dealing with young subjects. This article is profusely illustrated with woodcuts, some of which have artistic value.

Following this article is another special one, on Excision of the Knee-Joint, by Geo. E. Fenwick, M.D., C.M., containing a table of twenty-eight cases of the operation, twenty of which are the author's own. Only

one death (this from pyemia) is reported, while twenty-four recoveries, two amputations, and one doubtful, account for the rest.

The most profusely illustrated article in the volume is that on tumors, by Henry Trentham Butlin, F.R.C.S. In turning over the pages the plates, of course, first attract the attention, but the reader has only to invade the text to the extent of a single page to be as captivated by the author's style as he was pleased with the character of the illustrations. The keynote is sounded when the author denounces Cohnheim's theory of unused masses of embryonic cells to account for the appearance of tumors in after life, and speaks kindly and hopefully of the parasitic theory. Few will read his remarks on the etiology of tumors without being impressed by his deep thought and profound judgment. The remarks on multiple and secondary tumors are of particular interest, for they attempt to show how cancerous disease may be extended from one point to another. Although it is generally admitted that the disease passes along the course of the lymphatics to the nearest gland, and thence to other glands, it is not invariably so, as Gussenbauer has shown at least one case where the lymphatics contained no cancer cells, and the cord was due to long lines of these cells in the walls of blood-vessels and connective tissue. An interesting point is, how is the materies morbi carried in those cases where no cord-like indurations exist? In answer to this the author mentions Gussenbauer's theory of infection, published two years ago, in Langenbeck's Archives, in which the infective agent is said to be a very minute and highly refractive molecule, acting on endothelial cells preferably, but capable of transforming any and all kinds of cells, young or old, into cancer cells. In regarding the above theory the author advises caution, and likewise doubts the direct influence of a seminium on the cells and arrangement of same, of the various kinds of tissue transformed into cancer. Secondary tumors may appear without any glandular affection, and this is undoubtedly accomplished through the medium of bloodvessels; but the secondary tumor may appear in a part or organ very remote from the primary disease, and here the author suggests that certain organs may be more susceptible than others. Might not the influence of the nervous system be also taken into consideration? The secondary tumors bear almost always a marvelous resemblance to the primary ones, and even the metamorphoses of the latter are often repeated.

Virchow's anatomical classification is used, with, however, some additions to the sub-classes. Tumors are divided into two classes, connective tissue-tumors and epithelial tumors. The first class embraces lipoma, fibroma, chondroma, osteoma, myxoma, lymphoma, myoma, neuroma, angeioma, sarcoma, and endothelioma. The second class embraces papilloma, adenoma, and carcinoma. Sarcoma is subdivided into round-celled, spindle-celled, giant-celled and mixed-celled. Carcinoma is

sub-divided into spheriodal-celled, squamous-celled and cylindrical-celled.

If attention should be called to all that is interesting in this article on tumors, this notice would be lengthened out many pages; we must confine ourself to this mere allusion, and refer the reader to the article itself, which we feel sure will be read with eminent satisfaction. The colored and other lithographs are in keeping with the high standard of the text.

The elaborate article on Injuries of the Back, by John A. Lidell, A.M., M.D., comes next. Injuries of the integuments and other soft parts are first discussed, then comes the discussion on injuries of the vertebral column, and finally, that on injuries of the spinal membranes, spinal cord and spinal nerves. Punctured injuries of the nape of the neck are chiefly important from their liability to wound the vertebral artery, in which case they have hitherto been fatal in over ninety per cent of cases. Wounds not injuring the vertebral or other large arteries, are followed simply by feebleness of the extremities.

The remarks on injuries of the spinal column embrace dislocations, fractures, gunshot wounds, etc., of the vertebræ. Woodcuts showing the broken point of a knife, arrow head, and bullet lodged in the spinal column are to be seen, and the familar representations of President Garfield's wound are all reproduced.

The third class of injuries of the back are more important, since they implicate the spinal cord and nerves, producing myelitis, bed sores, disorders of the urinary organs, tympanitis, priapism, etc. At the end is placed a table of cases of resection of the spinal column for injury. Of the forty-three cases operated on, none recovered completely, four were relieved, in four the result was unknown, four were not benefited, and thirty-one died.

The last article in the volume, treating of malformations and diseases of the spine, is by Frederick Treves, F.R.C.S. The author launches immediately into the subject of spina bifida, followed by sacro-coccygeal and other congenital tumors, and caudal excrescences. Then follows anterior curvature of the spine, spondaylitis deformans, caries and necrosis, intervertebral arthritis, Pott's disease, and disease of the atlo-axoid region. The remarks on Pott's disease, are very comprehensive.

The volume from beginning to end bears the marks of an able editor, the typography as good as can be wished for, and the illustrations, as a general thing, good.

R. B. D.

PERPETUAL INJUNCTION.—In the U. S. Circuit Court in Maryland, it was, on the 10th of March, 1884, adjudged and decreed that a perpetual injunction be issued against Louis E. Wetter, and eighteen others, restraining them from imitating the labels of the Rumford Chemical Works, manufacturers of Horsford's Baking Powder, and also from using their old bottles.

The defendants were required to bring into court all fraudulent labels, and all imitation powder, for destruction. It was decreed that the Rumford Chemical Works be entitled to receive the profits which have been diverted from it by reason of the infringement, and the defendants were ordered to pay all costs.

Thus is another victory scored for the Rumford Chemical Works, who, not long since, caused several parties to be heavily fined for violating the injunction of the Supreme Court restraining all persons from offering for sale "Acid Phosphate" (so called) in any package which shall be a substantial or colorable imitation of Horsford's Acid Phosphate,